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Technical  
Memorandum**

**NASA TM- 100339**

**NASA MARSHALL SPACE FLIGHT CENTER  
SOLAR OBSERVATORY REPORT  
JANUARY - MARCH 1988**

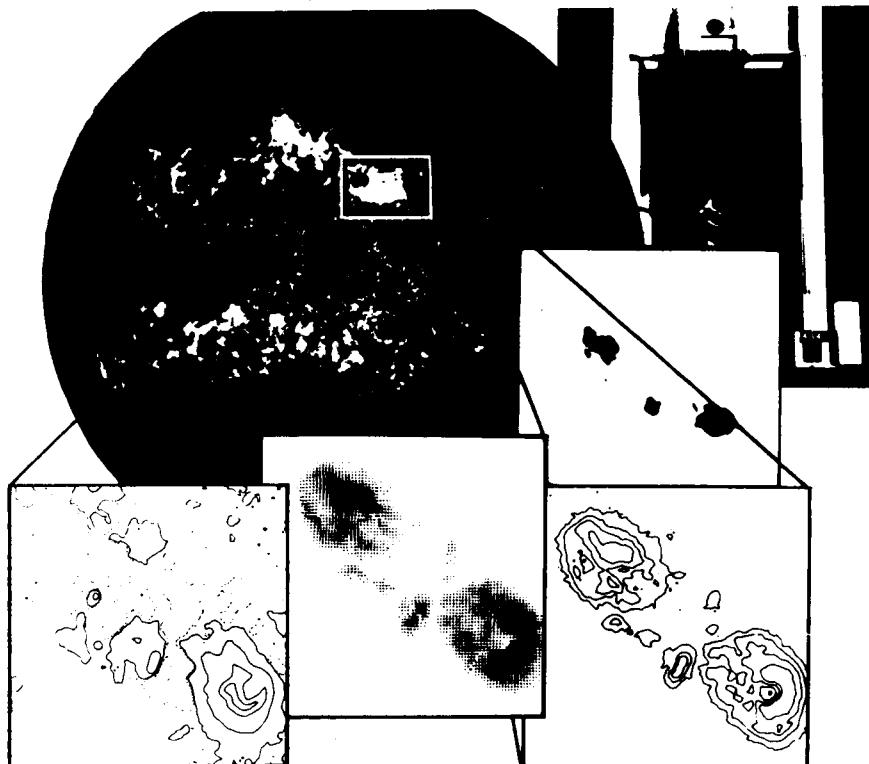
By James E. Smith

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**George C. Marshall Space Flight Center**

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## 16. ABSTRACT

This report provides a description of the NASA Marshall Space Flight Center's Solar Vector Magnetograph Facility and gives a summary of its observations and data reduction during January-March 1988. The systems that make up the facility are a magnetograph telescope, an H-alpha telescope, a Questar telescope, and a computer center. The data are represented by longitudinal contours with azimuth plots.

SOLAR OBSERVATORY  
MARSHALL SPACE FLIGHT CENTER  
TELESCOPE

SOLAR VECTOR MAGNETOGRAPH  
QUESTAR TELESCOPE  
H-ALPHA TELESCOPE  
COMPUTER CENTER

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## TECHNICAL MEMORANDUM

### NASA MARSHALL SPACE FLIGHT CENTER SOLAR OBSERVATORY REPORT

#### INTRODUCTION

This report provides a summary of the solar vector magnetic field, H-Alpha, and white-light observations made at the NASA/ Marshall Space Flight Center (MSFC) Solar Observatory during its daily period of operation.

The MSFC Solar Observatory facilities consist of the Solar Magnetograph, housed on top of a 12.8 meter tower, and an H-alpha telescope and Questar white-light telescope, both mounted on concrete pads at the base of the tower. A concrete block building provides office space, a darkroom for developing film and performing optical testing, a workshop, video displays, and a computer facility for data reduction.

#### THE NASA/MSFC SOLAR MAGNETOGRAPH

The NASA/MSFC Solar Magnetograph is an electro-optical instrument designed to provide information on the states of linear and circular polarization of a narrow wavelength interval ( $1/8 \text{ \AA}$ ) of the 525.022 nm (5250.22  $\text{\AA}$ ) solar absorption line over a  $5.75 \times 5.75$  arc min field of view with a pixel resolution of 2.7 arc sec and a time resolution of approximately 6 min for a complete vector magnetogram with a sensitivity of 1/1000. A complete description of the instrument and its calibration and performance characteristics can be found in reference 1 and 2.

#### H-ALPHA FACILITY

The facility inhouses a 12.5 cm aperture, Radzow H-alpha telescope system. This system consists of a f/8, 1 m focal length, 5 in telescope which produces a 16 mm diameter image at the prime focus. The spectral selection is provided by a Halle-Lyot birefringent filter with a 0.5  $\text{\AA}$  bandpass centered at H-alpha and tunable within  $\pm 1 \text{ \AA}$ . The telescope is equipped with standard mount, drive, and guidance systems, and it provides eyepiece viewing as well as film and TV scan output.

#### WHITE-LIGHT TELESCOPE

An 18 cm Questar telescope with a full aperture white-light prefilter is also available for viewing or photographing sunspots and/or other white-light solar features.

#### COMPUTER CENTER

The data reduction capability consists of a PDP 11/73 computer with 2 megabyte memory, control terminals, color graphics display monitor, line printer, two disk systems, and a magnetic tape recorder. The host computer is a PDP 11/23 computer with 2 megabyte memory and is used to control the data storage, the real time analysis, and the operation of the vector magnetograph system. The system hardware is controlled by an Intel microprocessor. After receiving commands from the PDP 11/23, the Intel configures the hardware to given specifics and then acquires the data. The Intel processor controls the timing of the solid state camera system, the polarizing optics, and the data transfer into temporary memory.

#### DATA DESCRIPTION

The MSFC Vector Magnetograph system records the Sun's photospheric magnetic field over an approximately  $6 \times 6$  arc min square field of view. The normal mode of operation produces magnetograms in a  $128 \times 128$  data array, yielding a pixel size of 2.8 arc second resolution. It takes about 6 min to produce one complete vector set. The data can then be displayed in various contour plots showing the field gradients and directions.

## OBSERVING RECORDS

The MSFC magnetograph observations are summarized in Appendix A. H-alpha observing records are summarized in Appendix B. White-light observing records are summarized in Appendix C. In Appendix D some example vector magnetograms are displayed.

## References

Hagyard, M. J., Cuming, N. P., West, E. A., and Smith, J. E., "The MSFC Solar Vector Magnetograph", *Solar Phys.* **80** (1982), 33.

Hagyard, M. J., Cuming, N. P., and West, E. A., "Proceeding of Kunming Workshop on Solar Physics and Interplanetary Travelling Phenomena", *C. De Jager and Chen Biao eds.* (1985a), 1216.

Abbreviations used in the records are as follows:

Region	Four digits means Boulder region number. 0-represents calibration. 1-represents studies at the sun center. 2-represents studies of any quiet area. 3-represents studies of coronal holes.
$\lambda$ P	Polarimeter waveplate position. 1-represents position to analyze circularly polarized light. 2-represents position to analyze linearly polarized light parallel to the analyzer. 3-represents position to analyze linearly polarized light 45 degrees to the analyzer.
Enh	Number of image enhancements.
FP	Zeiss filter position.(A change of one unit represents 10 mA)
CP	Center filter position of sunspot. (higher position units indicate blue shifted wavelengths).
C.T.	Correlation tracker.(0 represents off and 1 represents on).
Tape	Magnetics tape in which the data are stored.

**Appendix A:**  
**Magnetograph Observations**

**MAGNETOGRAPH OBSERVATIONS**

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80000.H	02-JAN-88	16:02:51	4912	1	256	773	764	194	0
S80001.H	02-JAN-88	16:07:07	4912	2	256	773	764	192	0
S80002.H	02-JAN-88	16:14:19	4912	3	256	773	764	192	0
S80003.H	02-JAN-88	16:23:26	4912	1	256	763	758	192	0
S80004.H	02-JAN-88	16:24:40	4912	2	256	763	758	192	0
S80005.H	02-JAN-88	16:26:57	4912	3	256	763	758	192	0
S80006.H	02-JAN-88	16:34:35	4912	1	256	745	754	192	0
S80007.H	02-JAN-88	16:39:04	4912	2	256	745	754	192	0
S80008.H	02-JAN-88	16:41:40	4912	3	256	745	754	192	0
S80009.H	02-JAN-88	16:44:31	4912	1	256	754	754	192	0
S80010.H	02-JAN-88	16:46:46	4912	2	256	754	754	192	0
S80011.H	02-JAN-88	16:49:11	4912	3	256	754	754	192	0
S80012.H	02-JAN-88	16:52:53	0	3	256	754	754	192	0
S80013.H	02-JAN-88	16:56:21	0	3	256	745	754	192	0
S80014.H	02-JAN-88	16:59:23	0	3	256	763	754	192	0
S80015.H	02-JAN-88	17:04:25	4912	1	256	763	754	192	0

**MAGNETOGRAPH OBSERVATIONS**

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S80017.H	08-FEB-88	21:25:53	4946	2	256	761	752	192	0
S80018.H	08-FEB-88	21:28:33	4946	3	256	761	752	192	0
S80019.H	08-FEB-88	21:33:32	4946	1	256	743	752	192	0
S80020.H	08-FEB-88	21:38:55	4946	2	256	743	752	192	0
S80021.H	08-FEB-88	21:41:22	4946	3	256	743	752	192	0
S80022.H	08-FEB-88	21:44:22	4946	1	256	752	752	192	0
S80023.H	08-FEB-88	21:46:44	4946	2	256	752	752	192	0
S80024.H	08-FEB-88	21:49:08	4946	3	256	752	752	192	0
S80025.H	08-FEB-88	21:58:27	4946	1	256	761	752	192	0
S80026.H	08-FEB-88	22:00:50	4946	2	256	761	752	192	0
S80027.H	08-FEB-88	22:03:12	4946	3	256	761	752	192	0
S80028.H	08-FEB-88	22:07:13	4939	1	256	743	752	192	0
S80029.H	08-FEB-88	22:09:35	4939	2	256	743	752	192	0
S80030.H	08-FEB-88	22:13:29	4939	3	256	743	752	192	0
S80031.H	08-FEB-88	22:16:33	0	1	256	743	752	192	0
S80032.H	08-FEB-88	22:18:36	0	2	256	743	752	192	0
S80033.H	08-FEB-88	22:20:40	0	3	256	743	752	192	0
S80034.H	08-FEB-88	22:23:37	0	1	256	761	752	192	0
S80035.H	08-FEB-88	22:26:03	0	2	256	761	752	192	0
S80036.H	08-FEB-88	22:28:28	0	3	256	761	752	192	0
S80037.H	08-FEB-88	22:33:08	0	1	256	761	752	192	0
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S80039.H	09-FEB-88	19:49:12	4946	2	256	743	734	192	0
S80040.H	09-FEB-88	19:51:41	4946	3	256	743	734	192	0
S80041.H	09-FEB-88	19:55:01	4946	1	256	725	734	192	0
S80042.H	09-FEB-88	19:57:26	4946	2	256	725	734	192	0
S80043.H	09-FEB-88	19:59:50	4946	3	256	725	734	192	0
S80044.H	09-FEB-88	20:02:40	4946	1	256	734	734	192	0
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S80046.H	09-FEB-88	20:07:35	4946	3	256	734	734	192	0
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S80049.H	09-FEB-88	20:19:15	4946	3	256	738	729	192	0
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S80052.H	09-FEB-88	20:28:21	4946	1	256	720	729	194	0
S80053.H	09-FEB-88	20:30:43	4946	2	256	720	729	194	0
S80054.H	09-FEB-88	20:33:06	4946	3	256	720	729	194	0
S80055.H	09-FEB-88	20:35:58	4946	1	256	729	729	194	0
S80056.H	09-FEB-88	20:38:22	4946	2	256	729	729	194	0
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S80058.H	09-FEB-88	20:44:49	0	1	256	729	729	194	0
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S80060.H	09-FEB-88	20:48:57	0	3	256	729	729	194	0

MAGNETOGRAPH OBSERVATIONS

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S80064.H	09-FEB-88	20:58:42	0	1	256	720	729	194	0
S80065.H	09-FEB-88	21:00:48	0	2	256	720	729	194	0
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S80069.H	10-FEB-88	16:17:05	4946	3	256	737	728	194	0
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S80078.H	10-FEB-88	17:03:12	4947	3	256	739	730	194	0
S80079.H	10-FEB-88	17:08:45	4947	1	256	721	730	194	0
S80080.H	10-FEB-88	17:11:09	4947	2	256	721	730	194	0
S80081.H	10-FEB-88	17:13:30	4947	3	256	721	730	194	0
S80082.H	10-FEB-88	17:16:09	4947	1	256	730	730	194	0
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S80087.H	10-FEB-88	20:57:13	4947	2	256	709	718	194	0
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S80121.H	16-FEB-88	21:44:40	4949	2	256	710	719	195	0
S80122.H	16-FEB-88	21:47:00	4949	3	256	710	719	195	0
S80123.H	16-FEB-88	21:49:46	4949	1	256	719	719	195	0
S80124.H	16-FEB-88	21:55:43	4949	1	256	717	719	195	0
S80125.H	17-FEB-88	19:15:43	4949	1	256	729	720	196	0
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S80135.H	17-FEB-88	19:54:45	4949	2	256	726	717	196	0
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S80140.H	17-FEB-88	20:15:49	4949	1	256	711	717	196	0
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S80145.H	17-FEB-88	20:29:43	4949	3	256	723	717	196	0
S80146.H	17-FEB-88	20:34:12	0	1	256	723	717	196	0
S80147.H	17-FEB-88	20:36:13	0	2	256	723	717	196	0
S80148.H	17-FEB-88	20:38:16	0	3	256	723	717	196	0
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### MAGNETOGRAPH OBSERVATIONS

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S80154.H	17-FEB-88	20:52:06	0	3	256	711	717	196	0
S80155.H	17-FEB-88	20:55:07	0	1	256	708	717	196	0
S80156.H	17-FEB-88	20:57:26	0	2	256	708	717	196	0
S80157.H	17-FEB-88	20:59:25	0	3	256	708	717	196	0
S80158.H	17-FEB-88	21:01:57	0	1	256	717	717	196	0
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S80160.H	17-FEB-88	21:06:00	0	3	256	717	717	196	0
S80161.H	17-FEB-88	21:09:01	0	1	256	717	717	196	0
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S80163.H	20-FEB-88	18:35:14	4949	2	64	726	717	196	0
S80164.H	20-FEB-88	19:00:35	4949	1	64	726	717	196	0
S80165.H	20-FEB-88	19:01:32	4949	2	64	726	717	196	0
S80166.H	20-FEB-88	19:02:31	4949	3	64	726	717	196	0
S80167.H	20-FEB-88	19:03:45	4949	1	64	718	717	196	0
S80168.H	20-FEB-88	19:04:46	4949	2	64	718	717	196	0
S80169.H	20-FEB-88	19:05:54	4949	3	64	718	717	196	0
S80170.H	20-FEB-88	19:12:11	4949	1	64	707	716	196	0
S80171.H	20-FEB-88	19:13:08	4949	2	64	707	716	196	0
S80172.H	20-FEB-88	19:14:10	4949	3	64	707	716	196	0
S80173.H	20-FEB-88	19:15:08	4949	1	64	707	716	196	0
S80174.H	20-FEB-88	19:16:06	4949	2	64	707	716	196	0
S80175.H	20-FEB-88	19:17:08	4949	3	64	707	716	196	0
S80176.H	20-FEB-88	19:21:11	4949	1	64	714	714	196	0
S80177.H	20-FEB-88	19:23:09	4949	2	64	714	714	196	0
S80178.H	20-FEB-88	19:24:10	4949	3	64	714	714	196	0
S80179.H	20-FEB-88	19:25:47	4949	1	64	723	714	196	0
S80180.H	20-FEB-88	19:32:53	4949	1	64	723	714	196	0
S80181.H	20-FEB-88	19:33:55	4949	2	64	723	714	196	0
S80182.H	20-FEB-88	19:34:55	4949	3	64	723	714	196	0
S80183.H	20-FEB-88	19:48:28	4949	1	64	726	714	196	0
S80184.H	20-FEB-88	19:49:27	4949	2	64	726	714	196	0
S80185.H	20-FEB-88	19:50:28	4949	3	64	726	714	196	0
S80186.H	20-FEB-88	20:14:37	4949	1	64	705	714	196	0
S80187.H	20-FEB-88	20:18:32	4949	2	64	705	714	196	0
S80188.H	20-FEB-88	20:22:35	4949	3	64	705	714	196	0
S80189.H	20-FEB-88	20:26:23	4949	1	64	710	714	196	0
S80190.H	20-FEB-88	20:27:35	4949	2	64	710	714	196	0
S80191.H	20-FEB-88	20:37:10	4949	3	64	710	714	196	0
S80192.H	20-FEB-88	20:40:01	4949	1	64	719	714	196	0
S80193.H	20-FEB-88	20:41:00	4949	2	64	719	714	196	0
S80194.H	20-FEB-88	20:47:36	4949	3	64	719	714	196	0
S80195.H	20-FEB-88	20:51:13	4949	1	64	701	710	196	0

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80196.H	20-FEB-88	21:16:24	4949	2	64	701	710	196	0
S80197.H	20-FEB-88	21:17:22	4949	3	64	701	710	196	0
S80198.H	20-FEB-88	21:35:05	0	3	64	701	710	196	0
S80199.H	20-FEB-88	21:36:12	0	3	64	710	710	196	0
S80200.H	20-FEB-88	21:37:10	0	3	64	719	710	197	0
S80201.H	20-FEB-88	21:39:04	0	3	64	719	710	197	0
S80202.H	22-FEB-88	17:01:36	4949	1	256	722	713	197	0
S80203.H	22-FEB-88	17:03:45	4949	2	256	722	713	197	0
S80204.H	22-FEB-88	17:05:52	4949	3	256	722	713	197	0
S80205.H	22-FEB-88	17:17:18	4949	1	256	704	713	197	0
S80206.H	22-FEB-88	17:19:33	4949	2	256	704	713	197	0
S80207.H	22-FEB-88	17:23:39	4949	3	256	704	713	197	0
S80208.H	22-FEB-88	17:26:23	4949	1	256	713	713	197	0
S80209.H	22-FEB-88	17:30:33	4949	2	256	713	713	197	0
S80210.H	22-FEB-88	17:32:46	4949	3	256	713	713	197	0
S80211.H	22-FEB-88	17:39:16	4949	1	256	722	713	197	0
S80212.H	22-FEB-88	17:41:31	4949	2	256	722	713	197	0
S80213.H	22-FEB-88	17:43:44	4949	3	256	722	713	197	0
S80214.H	22-FEB-88	17:47:55	4949	1	256	704	713	197	0
S80215.H	22-FEB-88	17:50:06	4949	2	256	704	713	197	0
S80216.H	22-FEB-88	17:52:15	4949	3	256	704	713	197	0
S80217.H	22-FEB-88	17:57:54	4949	1	0	713	713	197	0
S80218.H	22-FEB-88	17:58:58	4949	2	0	713	713	197	0
S80219.H	22-FEB-88	18:00:00	4949	3	0	713	713	197	0
S80220.H	22-FEB-88	18:15:39	4949	1	100	713	713	197	0
S80221.H	22-FEB-88	18:17:42	0	1	100	713	713	197	0
S80222.H	22-FEB-88	18:20:03	0	1	100	713	713	197	0
S80223.H	22-FEB-88	18:21:18	0	2	100	713	713	197	0
S80224.H	22-FEB-88	18:22:34	0	3	100	713	713	197	0
S80225.H	22-FEB-88	18:25:40	0	1	100	704	713	197	0
S80226.H	22-FEB-88	18:26:40	0	2	100	704	713	197	0
S80227.H	22-FEB-88	18:27:39	0	3	100	704	713	197	0
S80228.H	22-FEB-88	18:29:23	0	1	100	722	713	197	0
S80229.H	22-FEB-88	18:30:36	0	2	100	722	713	197	0
S80230.H	22-FEB-88	18:31:49	0	3	100	722	713	197	0
S80231.H	22-FEB-88	18:36:42	4949	1	100	722	713	197	0
S80232.H	22-FEB-88	18:38:00	4949	2	100	722	713	197	0
S80233.H	22-FEB-88	18:39:25	4949	3	100	722	713	197	0
S80234.H	22-FEB-88	19:18:33	4949	1	256	722	713	197	0
S80235.H	22-FEB-88	19:20:51	4949	2	256	722	713	197	0
S80236.H	22-FEB-88	19:22:59	4949	3	256	722	713	197	0
S80237.H	22-FEB-88	19:26:40	4949	1	256	704	713	197	0
S80238.H	22-FEB-88	19:28:52	4949	2	256	704	713	197	0
S80239.H	22-FEB-88	19:31:03	4949	3	256	704	713	197	0
S80240.H	22-FEB-88	19:33:46	4949	1	256	725	713	197	0

**MAGNETOGRAPH OBSERVATIONS**

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80241.H	22-FEB-88	19:35:58	4949	2	256	725	713	197	0
S80242.H	22-FEB-88	19:38:08	4949	3	256	725	713	197	0
S80243.H	22-FEB-88	19:43:28	4949	1	256	713	713	197	0
S80244.H	22-FEB-88	19:45:51	4949	2	256	713	713	197	0
S80245.H	22-FEB-88	19:48:07	4949	3	256	713	713	197	0
S80246.H	22-FEB-88	19:54:31	4949	1	189	722	713	198	0
S80247.H	29-FEB-88	15:14:34	4958	1	256	728	719	198	0
S80248.H	29-FEB-88	15:16:58	4958	2	256	728	719	198	0
S80249.H	29-FEB-88	15:19:42	4958	3	256	728	719	198	0
S80250.H	29-FEB-88	15:22:50	4958	1	256	710	719	198	0
S80251.H	29-FEB-88	15:25:07	4958	2	256	710	719	198	0
S80252.H	29-FEB-88	15:27:22	4958	3	256	710	719	198	0
S80253.H	29-FEB-88	15:30:21	4958	1	256	719	719	198	0
S80254.H	29-FEB-88	15:32:48	4958	2	256	719	719	198	0
S80255.H	29-FEB-88	15:35:02	4958	3	256	719	719	198	0
S80256.H	29-FEB-88	15:47:34	4957	1	256	728	719	198	0
S80257.H	29-FEB-88	15:49:52	4957	2	256	728	719	198	0
S80258.H	29-FEB-88	15:52:10	4957	3	256	728	719	198	0
S80259.H	29-FEB-88	15:55:05	4957	1	256	710	719	198	0
S80260.H	29-FEB-88	15:57:29	4957	2	256	710	719	198	0
S80261.H	29-FEB-88	15:59:47	4957	3	256	710	719	198	0
S80262.H	29-FEB-88	16:04:08	4957	1	256	719	719	198	0
S80263.H	29-FEB-88	16:06:31	4957	2	256	719	719	198	0
S80264.H	29-FEB-88	16:08:52	4957	3	256	719	719	198	0
S80265.H	29-FEB-88	16:21:47	0	1	256	719	719	198	0
S80266.H	29-FEB-88	16:24:06	0	2	256	719	719	198	0
S80267.H	29-FEB-88	16:26:12	0	3	256	719	719	198	0
S80268.H	29-FEB-88	16:30:17	0	1	256	728	719	198	0
S80269.H	29-FEB-88	16:32:25	0	2	256	728	719	198	0
S80270.H	29-FEB-88	16:34:29	0	3	256	728	719	198	0
S80271.H	29-FEB-88	16:37:08	0	1	256	710	719	198	0
S80272.H	29-FEB-88	16:39:13	0	2	256	710	719	198	0
S80273.H	29-FEB-88	16:41:18	0	3	256	710	719	198	0
S80274.H	29-FEB-88	16:44:09	0	1	256	710	719	198	0
S80275.H	29-FEB-88	16:46:18	0	2	256	710	719	198	0
S80276.H	29-FEB-88	16:57:29	4958	1	256	726	717	198	0
S80277.H	29-FEB-88	16:59:59	4958	2	256	726	717	198	0
S80278.H	29-FEB-88	17:02:20	4958	3	256	726	717	198	0
S80279.H	29-FEB-88	17:05:17	4958	1	256	708	717	198	0
S80280.H	29-FEB-88	17:07:40	4958	2	256	708	717	198	0
S80281.H	29-FEB-88	17:10:10	4958	3	256	708	717	198	0
S80282.H	29-FEB-88	17:12:54	4958	1	256	717	717	198	0
S80283.H	29-FEB-88	17:15:15	4958	2	256	717	717	198	0
S80284.H	29-FEB-88	17:17:37	4958	3	256	717	717	198	0
S80285.H	29-FEB-88	17:27:30	4958	1	256	726	717	198	0

**MAGNETOGRAPH OBSERVATIONS**

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80286.H	29-FEB-88	17:29:46	4958	2	256	726	717	198	0
S80287.H	29-FEB-88	17:32:02	4958	3	256	726	717	198	0
S80288.H	29-FEB-88	17:34:18	4958	1	256	726	717	198	0
S80289.H	29-FEB-88	17:36:33	4958	2	256	726	717	198	0
S80290.H	29-FEB-88	17:38:49	4958	3	256	726	717	198	0
S80291.H	29-FEB-88	17:41:05	4958	1	256	726	717	198	0
S80292.H	29-FEB-88	17:43:21	4958	2	256	726	717	198	0
S80293.H	29-FEB-88	17:45:36	4958	3	256	726	717	198	0
S80294.H	29-FEB-88	17:47:51	4958	1	256	726	717	198	0
S80295.H	29-FEB-88	17:50:06	4958	2	256	726	717	198	0
S80296.H	29-FEB-88	17:52:21	4958	3	256	726	717	198	0
S80297.H	29-FEB-88	17:54:15	4958	1	128	726	717	198	0
S80298.H	29-FEB-88	17:55:34	4958	2	128	726	717	198	0
S80299.H	29-FEB-88	17:56:53	4958	3	128	726	717	198	0
S80300.H	29-FEB-88	17:58:12	4958	1	128	726	717	199	0
S80301.H	29-FEB-88	17:59:31	4958	2	128	726	717	199	0
S80302.H	29-FEB-88	18:00:50	4958	3	128	726	717	199	0
S80303.H	29-FEB-88	18:02:09	4958	1	128	726	717	199	0
S80304.H	29-FEB-88	18:03:28	4958	2	128	726	717	199	0
S80305.H	29-FEB-88	18:04:47	4958	3	128	726	717	199	0
S80306.H	29-FEB-88	18:06:06	4958	1	128	726	717	199	0
S80307.H	29-FEB-88	18:07:25	4958	2	128	726	717	199	0
S80308.H	29-FEB-88	18:08:44	4958	3	128	726	717	199	0
S80309.H	29-FEB-88	18:10:03	4958	1	128	726	717	199	0
S80310.H	29-FEB-88	18:11:22	4958	2	128	726	717	199	0
S80311.H	29-FEB-88	18:12:41	4958	3	128	726	717	199	0
S80312.H	29-FEB-88	18:14:00	4958	1	128	726	717	199	0
S80313.H	29-FEB-88	18:15:18	4958	2	128	726	717	199	0
S80314.H	29-FEB-88	18:16:37	4958	3	128	726	717	199	0
S80315.H	29-FEB-88	18:17:56	4958	1	128	726	717	199	0
S80316.H	29-FEB-88	18:19:15	4958	2	128	726	717	199	0
S80317.H	29-FEB-88	18:20:35	4958	3	128	726	717	199	0
S80318.H	29-FEB-88	18:21:54	4958	1	128	726	717	199	0
S80319.H	29-FEB-88	18:23:13	4958	2	128	726	717	199	0
S80320.H	29-FEB-88	18:24:32	4958	3	128	726	717	199	0
S80321.H	29-FEB-88	18:27:34	0	1	128	708	717	199	0
S80322.H	29-FEB-88	18:29:01	0	2	128	708	717	199	0
S80323.H	29-FEB-88	18:30:26	0	3	128	708	717	199	0
S80324.H	29-FEB-88	18:32:03	4958	1	128	717	717	199	0
S80325.H	29-FEB-88	18:33:29	4958	2	128	717	717	199	0
S80326.H	29-FEB-88	18:34:55	4958	3	128	717	717	199	0
S80327.H	29-FEB-88	18:36:36	4958	1	128	718	717	199	0
S80328.H	29-FEB-88	18:38:06	4958	2	128	718	717	199	0
S80329.H	29-FEB-88	18:39:22	4958	3	128	718	717	199	0
S80330.H	29-FEB-88	18:41:17	4958	1	128	726	717	199	0

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80331.H	29-FEB-88	18:45:10	4958	1	128	726	717	289	0
S80332.H	29-FEB-88	18:46:29	4958	2	128	726	717	289	0
S80333.H	29-FEB-88	18:47:48	4958	3	128	726	717	289	0
S80334.H	29-FEB-88	18:49:07	4958	1	128	726	717	289	0
S80335.H	29-FEB-88	18:50:26	4958	2	128	726	717	289	0
S80336.H	29-FEB-88	18:51:45	4958	3	128	726	717	289	0
S80337.H	29-FEB-88	18:53:04	4958	1	128	726	717	289	0
S80338.H	29-FEB-88	18:54:23	4958	2	128	726	717	289	0
S80339.H	29-FEB-88	18:55:42	4958	3	128	726	717	289	0
S80340.H	29-FEB-88	18:57:01	4958	1	128	726	717	289	0
S80341.H	29-FEB-88	18:00:02	4958	1	128	726	717	289	0
S80342.H	29-FEB-88	19:01:13	4958	2	128	726	717	199	0
S80343.H	29-FEB-88	19:02:23	4958	3	128	726	717	199	0
S80344.H	29-FEB-88	19:03:42	4958	1	128	726	717	199	0
S80345.H	29-FEB-88	19:04:53	4958	2	128	726	717	199	0
S80346.H	29-FEB-88	19:06:04	4958	3	128	726	717	199	0
S80347.H	29-FEB-88	19:07:24	4958	1	128	726	717	199	0
S80348.H	29-FEB-88	19:08:34	4958	2	128	726	717	199	0
S80349.H	29-FEB-88	19:09:44	4958	3	128	726	717	199	0
S80350.H	29-FEB-88	19:11:04	4958	1	128	726	717	200	0
S80351.H	29-FEB-88	19:12:14	4958	2	128	726	717	200	0
S80352.H	29-FEB-88	19:13:24	4958	3	128	726	717	200	0
S80353.H	29-FEB-88	19:14:44	4958	1	128	726	717	200	0
S80354.H	29-FEB-88	19:15:55	4958	2	128	726	717	200	0
S80355.H	29-FEB-88	19:17:05	4958	3	128	726	717	200	0
S80356.H	29-FEB-88	19:18:25	4958	1	128	726	717	200	0
S80357.H	29-FEB-88	19:19:35	4958	2	128	726	717	200	0
S80358.H	29-FEB-88	19:20:46	4958	3	128	726	717	200	0
S80359.H	29-FEB-88	19:22:05	4958	1	128	726	717	200	0
S80360.H	29-FEB-88	19:23:15	4958	2	128	726	717	200	0
S80361.H	29-FEB-88	19:24:25	4958	3	128	726	717	200	0
S80362.H	29-FEB-88	19:25:44	4958	1	128	726	717	200	0
S80363.H	29-FEB-88	19:26:54	4958	2	128	726	717	200	0
S80364.H	29-FEB-88	19:28:04	4958	3	128	726	717	200	0
S80365.H	29-FEB-88	19:29:24	4958	1	128	726	717	200	0
S80366.H	29-FEB-88	19:30:34	4958	2	128	726	717	200	0
S80367.H	29-FEB-88	19:31:45	4958	3	128	726	717	200	0
S80368.H	29-FEB-88	19:33:04	4958	1	128	726	717	200	0
S80369.H	29-FEB-88	19:34:14	4958	2	128	726	717	200	0
S80370.H	29-FEB-88	19:35:25	4958	3	128	726	717	200	0
S80371.H	29-FEB-88	19:36:44	4958	1	128	726	717	200	0
S80372.H	29-FEB-88	19:37:54	4958	2	128	726	717	200	0
S80373.H	29-FEB-88	19:39:04	4958	3	128	726	717	200	0
S80374.H	29-FEB-88	19:40:23	4958	1	128	726	717	200	0
S80375.H	29-FEB-88	19:41:33	4958	2	128	726	717	200	0

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80376.H	29-FEB-88	19:42:43	4958	3	128	726	717	200	0
S80377.H	29-FEB-88	19:44:02	4958	1	128	726	717	200	0
S80378.H	29-FEB-88	19:45:12	4958	2	128	726	717	200	0
S80379.H	29-FEB-88	19:46:22	4958	3	128	726	717	200	0
S80380.H	29-FEB-88	19:47:41	4958	1	128	726	717	200	0
S80381.H	29-FEB-88	19:48:51	4958	2	128	726	717	200	0
S80382.H	29-FEB-88	19:50:01	4958	3	128	726	717	200	0
S80383.H	29-FEB-88	19:51:20	4958	1	128	726	717	200	0
S80384.H	29-FEB-88	19:52:30	4958	2	128	726	717	200	0
S80385.H	29-FEB-88	19:53:40	4958	3	128	726	717	200	0
S80386.H	29-FEB-88	19:57:25	4958	1	256	708	717	200	0
S80387.H	29-FEB-88	19:59:35	4958	2	256	708	717	200	0
S80388.H	29-FEB-88	20:02:39	4958	3	256	708	717	200	0
S80389.H	29-FEB-88	20:05:24	4958	1	256	726	717	200	0
S80390.H	29-FEB-88	20:07:37	4958	2	256	726	717	200	0
S80391.H	29-FEB-88	20:09:48	4958	3	256	726	717	200	0
S80392.H	29-FEB-88	20:15:55	0	1	256	726	717	200	0
S80393.H	29-FEB-88	20:18:51	0	2	256	726	717	200	0
S80394.H	29-FEB-88	20:21:04	0	3	256	726	717	200	0
S80395.H	29-FEB-88	20:23:59	0	1	256	708	717	200	0
S80396.H	29-FEB-88	20:26:11	0	2	256	708	717	200	0
S80397.H	29-FEB-88	20:28:24	0	3	256	708	717	200	0

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80398.H	01-MAR-88	14:18:40	4957	1	256	724	715	200	1
S80399.H	01-MAR-88	14:21:02	4957	2	256	724	715	200	1
S80400.H	01-MAR-88	14:23:23	4957	3	256	724	715	201	1
S80401.H	01-MAR-88	14:26:45	4957	1	256	706	715	201	1
S80402.H	01-MAR-88	14:26:18	4957	2	256	706	715	201	1
S80403.H	01-MAR-88	14:28:38	4957	3	256	706	715	201	1
S80404.H	01-MAR-88	14:34:48	4957	1	256	717	717	201	1
S80405.H	01-MAR-88	14:37:08	4957	2	256	717	717	201	1
S80406.H	01-MAR-88	14:39:28	4957	3	256	717	717	201	1
S80407.H	01-MAR-88	14:55:48	4958	1	256	725	716	201	1
S80408.H	01-MAR-88	14:58:05	4958	2	256	725	716	201	1
S80409.H	01-MAR-88	15:00:20	4958	3	256	725	716	201	1
S80410.H	01-MAR-88	15:03:10	4958	1	256	707	716	201	1
S80411.H	01-MAR-88	15:05:27	4958	2	256	707	716	201	1
S80412.H	01-MAR-88	15:10:03	4958	3	256	707	716	201	1
S80413.H	01-MAR-88	15:12:54	4958	1	256	716	716	201	1
S80414.H	01-MAR-88	15:15:01	4958	2	256	716	716	201	1
S80415.H	01-MAR-88	15:17:10	4958	3	256	716	716	201	1
S80416.H	01-MAR-88	15:21:22	0	1	256	716	716	201	0
S80417.H	01-MAR-88	15:23:16	0	2	256	716	716	201	0
S80418.H	01-MAR-88	15:25:11	0	3	256	716	716	201	0
S80419.H	01-MAR-88	15:27:29	0	1	256	707	716	201	0
S80420.H	01-MAR-88	15:29:24	0	2	256	707	716	201	0
S80421.H	01-MAR-88	15:31:19	0	3	256	707	716	201	0
S80422.H	01-MAR-88	15:33:47	0	1	256	725	716	201	0
S80423.H	01-MAR-88	15:35:42	0	2	256	725	716	201	0
S80424.H	01-MAR-88	15:37:36	0	3	256	725	716	201	0
S80425.H	01-MAR-88	15:39:52	0	1	256	725	716	201	0
S80426.H	01-MAR-88	15:47:05	4958	1	128	725	716	201	1
S80427.H	01-MAR-88	15:48:27	4958	2	128	725	716	201	1
S80428.H	01-MAR-88	15:49:53	4958	3	128	725	716	201	1
S80429.H	01-MAR-88	15:51:54	4958	1	128	707	716	201	1
S80430.H	01-MAR-88	15:53:30	4958	2	128	707	716	201	1
S80431.H	01-MAR-88	15:55:27	4958	3	128	707	716	201	1
S80432.H	01-MAR-88	15:58:59	4958	1	128	707	716	201	1
S80433.H	01-MAR-88	16:00:27	4958	2	128	707	716	201	1
S80434.H	01-MAR-88	16:01:54	4958	3	128	707	716	201	1
S80435.H	01-MAR-88	16:04:34	4958	1	128	716	716	201	1
S80436.H	01-MAR-88	16:05:57	4958	2	128	716	716	201	1
S80437.H	01-MAR-88	16:07:25	4958	3	128	716	716	201	1
S80438.H	01-MAR-88	16:24:37	4958	1	128	725	716	201	1
S80439.H	01-MAR-88	16:25:44	4958	2	128	725	716	201	1
S80440.H	01-MAR-88	16:26:51	4958	3	128	725	716	201	1
S80441.H	01-MAR-88	16:28:06	4958	1	128	725	716	201	1
S80442.H	01-MAR-88	16:29:13	4958	2	128	725	716	201	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80443.H	01-MAR-88	16:30:20	4958	3	128	725	716	201	1
S80444.H	01-MAR-88	16:31:36	4958	1	128	725	716	201	1
S80445.H	01-MAR-88	16:32:43	4958	2	128	725	716	201	1
S80446.H	01-MAR-88	16:33:50	4958	3	128	725	716	201	1
S80447.H	01-MAR-88	16:35:06	4958	1	128	725	716	201	1
S80448.H	01-MAR-88	16:36:13	4958	2	128	725	716	201	1
S80449.H	01-MAR-88	16:37:21	4958	3	128	725	716	201	1
S80450.H	01-MAR-88	16:38:38	4958	1	128	725	716	202	1
S80451.H	01-MAR-88	16:39:47	4958	2	128	725	716	202	1
S80452.H	01-MAR-88	16:40:55	4958	3	128	725	716	202	1
S80453.H	01-MAR-88	16:42:11	4958	1	128	725	716	202	1
S80454.H	01-MAR-88	16:43:20	4958	2	128	725	716	202	1
S80455.H	01-MAR-88	16:44:28	4958	3	128	725	716	202	1
S80456.H	01-MAR-88	16:45:45	4958	1	128	725	716	202	1
S80457.H	01-MAR-88	16:46:52	4958	2	128	725	716	202	1
S80458.H	01-MAR-88	16:48:00	4958	3	128	725	716	202	1
S80459.H	01-MAR-88	16:49:17	4958	1	128	725	716	202	1
S80460.H	01-MAR-88	16:50:26	4958	2	128	725	716	202	1
S80461.H	01-MAR-88	16:51:34	4958	3	128	725	716	202	1
S80462.H	01-MAR-88	16:52:50	4958	1	128	725	716	202	1
S80463.H	01-MAR-88	16:54:00	4958	2	128	725	716	202	1
S80464.H	01-MAR-88	16:55:08	4958	3	128	725	716	202	1
S80465.H	01-MAR-88	16:56:25	4958	1	128	725	716	202	1
S80466.H	01-MAR-88	16:57:31	4958	2	128	725	716	202	1
S80467.H	01-MAR-88	16:58:39	4958	3	128	725	716	202	1
S80468.H	01-MAR-88	16:59:55	4958	1	128	725	716	202	1
S80469.H	01-MAR-88	17:01:04	4958	2	128	725	716	202	1
S80470.H	01-MAR-88	17:02:11	4958	3	128	725	716	202	1
S80471.H	01-MAR-88	17:03:29	4958	1	128	725	716	202	1
S80472.H	01-MAR-88	17:04:37	4958	2	128	725	716	202	1
S80473.H	01-MAR-88	17:05:43	4958	3	128	725	716	202	1
S80474.H	01-MAR-88	17:07:00	4958	1	128	725	716	202	1
S80475.H	01-MAR-88	17:08:06	4958	2	128	725	716	202	1
S80476.H	01-MAR-88	17:09:13	4958	3	128	725	716	202	1
S80477.H	01-MAR-88	17:10:29	4958	1	128	725	716	202	1
S80478.H	01-MAR-88	17:11:36	4958	2	128	725	716	202	1
S80479.H	01-MAR-88	17:12:43	4958	3	128	725	716	202	1
S80480.H	01-MAR-88	17:13:59	4958	1	128	725	716	202	1
S80481.H	01-MAR-88	17:15:06	4958	2	128	725	716	202	1
S80482.H	01-MAR-88	17:16:13	4958	3	128	725	716	202	1
S80483.H	01-MAR-88	17:17:28	4958	1	128	725	716	202	1
S80484.H	01-MAR-88	17:18:35	4958	2	128	725	716	202	1
S80485.H	01-MAR-88	17:19:42	4958	3	128	725	716	202	1
S80486.H	01-MAR-88	17:20:58	4958	1	128	725	716	202	1
S80487.H	01-MAR-88	17:22:05	4958	2	128	725	716	202	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80488.H	01-MAR-88	17:23:12	4958	3	128	725	716	202	1
S80489.H	01-MAR-88	17:24:27	4958	1	128	725	716	202	1
S80490.H	01-MAR-88	17:25:34	4958	2	128	725	716	202	1
S80491.H	01-MAR-88	17:26:41	4958	3	128	725	716	202	1
S80492.H	01-MAR-88	17:29:12	4958	1	128	707	716	202	1
S80493.H	01-MAR-88	17:30:35	4958	2	128	707	716	202	1
S80494.H	01-MAR-88	17:31:58	4958	3	128	707	716	202	1
S80495.H	01-MAR-88	17:33:31	4958	1	128	716	716	202	1
S80496.H	01-MAR-88	17:34:55	4958	2	128	716	716	202	1
S80497.H	01-MAR-88	17:36:17	4958	3	128	716	716	202	1
S80498.H	01-MAR-88	17:38:22	4958	1	128	725	716	202	1
S80499.H	01-MAR-88	17:39:39	4958	2	128	725	716	202	1
S80500.H	01-MAR-88	17:40:56	4958	3	128	725	716	203	1
S80501.H	01-MAR-88	17:42:12	4958	1	128	725	716	203	1
S80502.H	01-MAR-88	17:43:29	4958	2	128	725	716	203	1
S80503.H	01-MAR-88	17:44:46	4958	3	128	725	716	203	1
S80504.H	01-MAR-88	17:46:03	4958	1	128	725	716	203	1
S80505.H	01-MAR-88	17:47:22	4958	2	128	725	716	203	1
S80506.H	01-MAR-88	17:48:42	4958	3	128	725	716	203	1
S80507.H	01-MAR-88	17:50:00	4958	1	128	725	716	203	1
S80508.H	01-MAR-88	17:51:18	4958	2	128	725	716	203	1
S80509.H	01-MAR-88	17:52:36	4958	3	128	725	716	203	1
S80510.H	01-MAR-88	17:53:52	4958	1	128	725	716	203	1
S80511.H	01-MAR-88	17:55:08	4958	2	128	725	716	203	1
S80512.H	01-MAR-88	17:56:25	4958	3	128	725	716	203	1
S80513.H	01-MAR-88	17:57:42	4958	1	128	725	716	203	1
S80514.H	01-MAR-88	17:58:59	4958	2	128	725	716	203	1
S80515.H	01-MAR-88	18:00:15	4958	3	128	725	716	203	1
S80516.H	01-MAR-88	18:01:32	4958	1	128	725	716	203	1
S80517.H	01-MAR-88	18:02:49	4958	2	128	725	716	203	1
S80518.H	01-MAR-88	18:04:06	4958	3	128	725	716	203	1
S80519.H	01-MAR-88	18:05:23	4958	1	128	725	716	203	1
S80520.H	01-MAR-88	18:06:40	4958	2	128	725	716	203	1
S80521.H	01-MAR-88	18:07:58	4958	3	128	725	716	203	1
S80522.H	01-MAR-88	18:09:15	4958	1	128	725	716	203	1
S80523.H	01-MAR-88	18:10:34	4958	2	128	725	716	203	1
S80524.H	01-MAR-88	18:11:50	4958	3	128	725	716	203	1
S80525.H	01-MAR-88	18:13:07	4958	1	128	725	716	203	1
S80526.H	01-MAR-88	18:14:24	4958	2	128	725	716	203	1
S80527.H	01-MAR-88	18:15:41	4958	3	128	725	716	203	1
S80528.H	01-MAR-88	18:16:58	4958	1	128	725	716	203	1
S80529.H	01-MAR-88	18:18:16	4958	2	128	725	716	203	1
S80530.H	01-MAR-88	18:19:32	4958	3	128	725	716	203	1
S80531.H	01-MAR-88	18:20:49	4958	1	128	725	716	203	1
S80532.H	01-MAR-88	18:22:06	4958	2	128	725	716	203	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80533.H	01-MAR-88	18:23:22	4958	3	128	725	716	203	1
S80534.H	01-MAR-88	18:24:39	4958	1	128	725	716	203	1
S80535.H	01-MAR-88	18:25:56	4958	2	128	725	716	203	1
S80536.H	01-MAR-88	18:27:13	4958	3	128	725	716	203	1
S80537.H	01-MAR-88	18:28:29	4958	1	128	725	716	203	1
S80538.H	01-MAR-88	18:29:46	4958	2	128	725	716	203	1
S80539.H	01-MAR-88	18:31:03	4958	3	128	725	716	203	1
S80540.H	01-MAR-88	18:32:20	4958	1	128	725	716	203	1
S80541.H	01-MAR-88	18:33:37	4958	2	128	725	716	203	1
S80542.H	01-MAR-88	18:34:54	4958	3	128	725	716	203	1
S80543.H	01-MAR-88	18:36:11	4958	1	128	725	716	203	1
S80544.H	01-MAR-88	18:37:28	4958	2	128	725	716	203	1
S80545.H	01-MAR-88	18:38:45	4958	3	128	725	716	203	1
S80546.H	01-MAR-88	18:43:05	4958	1	128	707	716	203	1
S80547.H	01-MAR-88	18:44:30	4958	2	128	707	716	203	1
S80548.H	01-MAR-88	18:45:56	4958	3	128	707	716	203	1
S80549.H	01-MAR-88	18:47:39	4958	1	128	716	716	203	1
S80550.H	01-MAR-88	18:49:24	4958	2	128	716	716	204	1
S80551.H	01-MAR-88	18:51:02	4958	3	128	716	716	204	1
S80552.H	01-MAR-88	18:59:45	0	1	128	725	716	204	0
S80553.H	01-MAR-88	19:01:00	0	2	128	725	716	204	0
S80554.H	01-MAR-88	19:02:14	0	3	128	725	716	204	0
S80555.H	01-MAR-88	19:04:39	0	1	256	725	716	204	0
S80556.H	01-MAR-88	19:06:59	0	2	256	725	716	204	0
S80557.H	01-MAR-88	19:09:21	0	3	256	725	716	204	0
S80558.H	01-MAR-88	19:12:06	0	1	256	707	716	204	0
S80559.H	01-MAR-88	19:14:26	0	2	256	707	716	204	0
S80560.H	01-MAR-88	19:16:48	0	3	256	707	716	204	0
S80561.H	01-MAR-88	19:18:28	0	1	128	707	716	204	0
S80562.H	01-MAR-88	19:19:55	0	2	128	707	716	204	0
S80563.H	01-MAR-88	19:21:25	0	3	128	707	716	204	0
S80564.H	01-MAR-88	19:23:20	0	1	128	716	716	204	0
S80565.H	01-MAR-88	19:24:35	0	2	128	716	716	204	0
S80566.H	01-MAR-88	19:25:52	0	3	128	716	716	204	0
S80567.H	01-MAR-88	19:28:14	0	1	256	716	716	204	0
S80568.H	01-MAR-88	19:30:23	0	2	256	716	716	204	0
S80569.H	01-MAR-88	19:32:35	0	3	256	716	716	204	0
S80570.H	01-MAR-88	19:35:01	0	1	256	716	716	204	0
S80571.H	01-MAR-88	19:40:35	4958	1	256	716	716	204	1
S80572.H	01-MAR-88	19:43:02	4958	2	256	716	716	204	1
S80573.H	01-MAR-88	19:45:17	4958	3	256	716	716	204	1
S80574.H	01-MAR-88	19:50:05	4958	1	256	725	716	204	1
S80575.H	01-MAR-88	19:52:12	4958	2	256	725	716	204	1
S80576.H	01-MAR-88	19:54:29	4958	3	256	725	716	204	1
S80577.H	01-MAR-88	19:57:22	4958	1	256	707	716	204	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80578.H	01-MAR-88	19:59:37	4958	2	256	707	716	204	1
S80579.H	01-MAR-88	20:01:54	4958	3	256	707	716	204	1
S80580.H	01-MAR-88	20:13:36	4958	1	256	718	718	204	1
S80581.H	01-MAR-88	20:15:52	4958	2	256	718	718	204	1
S80582.H	01-MAR-88	20:18:07	4958	3	256	718	718	204	1
S80583.H	01-MAR-88	20:20:39	4958	1	256	727	718	204	1
S80584.H	01-MAR-88	20:22:57	4958	2	256	727	718	204	1
S80585.H	01-MAR-88	20:25:11	4958	3	256	727	718	204	1
S80586.H	01-MAR-88	20:28:05	4957	1	256	709	718	204	1
S80587.H	01-MAR-88	20:30:25	4957	2	256	709	718	204	1
S80588.H	01-MAR-88	20:32:39	4957	3	256	709	718	204	1
S80589.H	02-MAR-88	15:18:02	4958	1	256	725	716	204	1
S80590.H	02-MAR-88	15:20:17	4958	2	256	725	716	204	1
S80591.H	02-MAR-88	15:22:53	4958	3	256	725	716	204	1
S80592.H	02-MAR-88	15:25:45	4958	1	256	707	716	204	1
S80593.H	02-MAR-88	15:30:41	4958	2	256	707	716	204	1
S80594.H	02-MAR-88	15:32:56	4958	3	256	707	716	204	1
S80595.H	02-MAR-88	16:43:18	4958	1	256	716	716	204	1
S80596.H	02-MAR-88	17:05:32	4957	1	256	727	718	204	1
S80597.H	02-MAR-88	17:11:52	4957	2	256	727	718	204	1
S80598.H	02-MAR-88	17:14:08	4957	3	256	727	718	204	1
S80599.H	02-MAR-88	17:17:13	4957	1	256	709	718	204	1
S80600.H	02-MAR-88	17:20:09	4957	2	256	709	718	205	1
S80601.H	02-MAR-88	17:22:26	4957	3	256	709	718	205	1
S80602.H	02-MAR-88	17:26:29	4957	1	256	718	718	205	1
S80603.H	02-MAR-88	17:32:10	4957	2	256	718	718	205	1
S80604.H	02-MAR-88	17:34:29	4957	3	256	718	718	205	1
S80605.H	02-MAR-88	19:24:43	4958	1	256	725	716	205	1
S80606.H	02-MAR-88	19:27:01	4958	2	256	725	716	205	1
S80607.H	02-MAR-88	19:29:30	4958	3	256	725	716	205	1
S80608.H	02-MAR-88	19:32:22	4958	1	256	707	716	205	1
S80609.H	02-MAR-88	19:34:41	4958	2	256	707	716	205	1
S80610.H	02-MAR-88	19:37:01	4958	3	256	707	716	205	1
S80611.H	02-MAR-88	19:40:32	4958	1	256	716	716	205	1
S80612.H	02-MAR-88	19:42:49	4958	2	256	716	716	205	1
S80613.H	02-MAR-88	19:45:05	4958	3	256	716	716	205	1
S80614.H	02-MAR-88	19:52:46	4957	1	256	727	718	205	1
S80615.H	02-MAR-88	19:55:08	4957	2	256	727	718	205	1
S80616.H	06-MAR-88	15:19:15	4957	1	256	725	716	205	1
S80617.H	06-MAR-88	15:21:31	4957	2	256	725	716	205	1
S80618.H	06-MAR-88	15:23:47	4957	3	256	725	716	205	1
S80619.H	06-MAR-88	15:33:49	4957	1	256	707	716	205	1
S80620.H	06-MAR-88	15:36:04	4957	2	256	707	716	205	1
S80621.H	06-MAR-88	15:38:21	4957	3	256	707	716	205	1
S80622.H	06-MAR-88	15:41:12	4957	1	256	716	716	205	1

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80623.H	06-MAR-88	15:43:27	4957	2	256	716	716	205	1
S80624.H	06-MAR-88	15:46:12	4957	3	256	716	716	205	1
S80625.H	06-MAR-88	16:10:01	4958	1	256	724	715	205	1
S80626.H	06-MAR-88	16:12:18	4958	2	256	724	715	205	1
S80627.H	06-MAR-88	16:14:34	4958	3	256	724	715	205	1
S80628.H	06-MAR-88	16:17:28	4958	1	256	706	715	205	1
S80629.H	06-MAR-88	16:19:44	4958	2	256	706	715	205	1
S80630.H	06-MAR-88	16:22:00	4958	3	256	706	715	205	1
S80631.H	06-MAR-88	16:24:47	4958	1	256	715	715	205	1
S80632.H	06-MAR-88	16:27:04	4958	2	256	715	715	205	1
S80633.H	06-MAR-88	16:29:24	4958	3	256	715	715	205	1
S80634.H	06-MAR-88	16:34:26	0	1	256	706	715	205	1
S80635.H	07-MAR-88	14:54:56	4957	1	256	724	715	205	1
S80636.H	07-MAR-88	14:57:19	4957	2	256	724	715	205	1
S80637.H	07-MAR-88	14:59:40	4957	3	256	724	715	205	1
S80638.H	07-MAR-88	15:02:40	4957	1	256	706	715	205	1
S80639.H	07-MAR-88	15:07:35	4957	2	256	706	715	205	1
S80640.H	07-MAR-88	15:09:59	4957	3	256	706	715	205	1
S80641.H	07-MAR-88	15:12:45	4957	1	256	715	715	205	1
S80642.H	07-MAR-88	15:15:07	4957	2	256	715	715	205	1
S80643.H	07-MAR-88	15:17:35	4957	3	256	715	715	205	1
S80644.H	07-MAR-88	15:34:58	4963	1	256	725	716	205	1
S80645.H	07-MAR-88	15:37:28	4963	2	256	725	716	205	1
S80646.H	07-MAR-88	15:39:50	4963	3	256	725	716	205	1
S80647.H	07-MAR-88	15:43:56	4963	1	256	707	716	205	1
S80648.H	07-MAR-88	15:49:37	4963	2	256	707	716	205	1
S80649.H	07-MAR-88	15:52:00	4963	3	256	707	716	205	1
S80650.H	07-MAR-88	15:55:13	4963	1	256	716	716	206	1
S80651.H	07-MAR-88	15:57:39	4963	2	256	716	716	206	1
S80652.H	07-MAR-88	16:00:03	4963	3	256	716	716	206	1
S80653.H	07-MAR-88	16:16:08	4958	1	256	723	714	206	1
S80654.H	07-MAR-88	16:18:35	4958	2	256	723	714	206	1
S80655.H	07-MAR-88	16:21:01	4958	3	256	723	714	206	1
S80656.H	07-MAR-88	16:27:59	4958	1	256	705	714	206	1
S80657.H	07-MAR-88	16:30:25	4958	2	256	705	714	206	1
S80658.H	07-MAR-88	16:32:50	4958	3	256	705	714	206	1
S80659.H	07-MAR-88	16:35:59	4958	1	256	714	714	206	1
S80660.H	07-MAR-88	16:38:26	4958	2	256	714	714	206	1
S80661.H	07-MAR-88	16:40:55	4958	3	256	714	714	206	1
S80662.H	07-MAR-88	16:46:14	0	1	256	706	715	206	0
S80663.H	07-MAR-88	16:48:23	0	2	256	706	715	206	0
S80664.H	07-MAR-88	16:50:32	0	3	256	706	715	206	0
S80665.H	07-MAR-88	16:52:56	0	1	256	715	715	206	0
S80666.H	07-MAR-88	16:55:04	0	2	256	715	715	206	0
S80667.H	07-MAR-88	16:57:12	0	3	256	715	715	206	0

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80668.H	07-MAR-88	16:59:45	0	1	256	724	715	206	0
S80669.H	07-MAR-88	17:01:53	0	2	256	724	715	206	0
S80670.H	07-MAR-88	17:04:01	0	3	256	724	715	206	0
S80671.H	07-MAR-88	17:11:40	4957	1	256	724	715	206	1
S80672.H	07-MAR-88	17:14:01	4957	2	256	724	715	206	1
S80673.H	07-MAR-88	17:16:23	4957	3	256	724	715	206	1
S80674.H	07-MAR-88	17:19:22	4957	1	256	706	715	206	1
S80675.H	07-MAR-88	17:21:41	4957	2	256	706	715	206	1
S80676.H	07-MAR-88	17:24:03	4957	3	256	706	715	206	1
S80677.H	07-MAR-88	19:44:55	4957	1	256	724	715	206	1
S80678.H	07-MAR-88	19:47:16	4957	2	256	724	715	206	1
S80679.H	07-MAR-88	19:49:44	4957	3	256	724	715	206	1
S80680.H	07-MAR-88	19:52:54	4957	1	256	706	715	206	1
S80681.H	07-MAR-88	19:55:21	4957	2	256	706	715	206	1
S80682.H	07-MAR-88	19:57:50	4957	3	256	706	715	206	1
S80683.H	07-MAR-88	20:00:39	4957	1	256	724	715	206	1
S80684.H	07-MAR-88	20:03:01	4957	2	256	724	715	206	1
S80685.H	07-MAR-88	20:05:22	4957	3	256	724	715	206	1
S80686.H	07-MAR-88	20:08:45	0	1	256	724	715	206	0
S80687.H	07-MAR-88	20:11:05	0	2	256	724	715	206	0
S80688.H	07-MAR-88	20:13:28	0	3	256	724	715	206	0
S80689.H	07-MAR-88	20:17:20	0	1	256	706	715	206	0
S80690.H	07-MAR-88	20:19:28	0	2	256	706	715	206	0
S80691.H	07-MAR-88	20:21:54	0	3	256	706	715	206	0
S80692.H	11-MAR-88	14:56:32	4963	1	256	723	714	206	1
S80693.H	15-MAR-88	15:34:26	4964	1	256	727	718	206	1
S80694.H	15-MAR-88	15:36:48	4964	2	256	727	718	206	1
S80695.H	15-MAR-88	15:39:06	4964	3	256	727	718	206	1
S80696.H	15-MAR-88	17:25:10	4964	1	256	763	754	206	1
S80697.H	15-MAR-88	17:27:27	4964	2	256	763	754	206	1
S80698.H	15-MAR-88	17:29:43	4964	3	256	763	754	206	1
S80699.H	15-MAR-88	17:37:01	4964	1	256	745	754	206	1
S80700.H	15-MAR-88	17:47:19	4964	2	256	745	754	207	1
S80701.H	15-MAR-88	18:01:32	4964	3	256	745	754	207	1
S80702.H	15-MAR-88	18:04:01	4964	1	256	745	754	207	1
S80703.H	15-MAR-88	18:06:12	4964	2	256	745	754	207	1
S80704.H	15-MAR-88	18:08:51	4964	3	256	745	754	207	1
S80705.H	15-MAR-88	18:11:27	4964	1	256	745	754	207	1
S80706.H	15-MAR-88	18:14:57	4964	2	256	745	754	207	1
S80707.H	15-MAR-88	18:17:29	4964	3	256	745	754	207	1
S80708.H	15-MAR-88	18:25:15	4964	1	256	763	754	207	1
S80709.H	15-MAR-88	18:27:55	4964	2	256	763	754	207	1
S80710.H	15-MAR-88	18:30:20	4964	3	256	763	754	207	1
S80711.H	15-MAR-88	18:34:07	4964	1	256	754	754	207	1
S80712.H	15-MAR-88	19:08:29	4964	1	256	763	754	207	1

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80713.H	15-MAR-88	19:10:45	4964	2	256	763	754	207	1
S80714.H	15-MAR-88	19:17:20	4964	3	256	763	754	207	1
S80715.H	15-MAR-88	19:20:45	4964	1	256	745	754	207	1
S80716.H	15-MAR-88	19:24:25	4964	2	256	745	754	207	1
S80717.H	15-MAR-88	19:32:32	4964	3	256	745	754	207	1
S80718.H	15-MAR-88	19:35:15	4964	1	256	754	754	207	1
S80719.H	15-MAR-88	19:42:49	4964	2	256	754	754	207	1
S80720.H	15-MAR-88	19:45:01	4964	3	256	754	754	207	1
S80721.H	15-MAR-88	19:57:39	4964	1	256	763	754	207	1
S80722.H	15-MAR-88	19:59:53	4964	2	256	763	754	207	1
S80723.H	15-MAR-88	20:02:04	4964	3	256	763	754	207	1
S80724.H	15-MAR-88	20:05:08	4964	1	256	745	754	207	1
S80725.H	15-MAR-88	20:17:23	4964	2	256	745	754	207	1
S80726.H	15-MAR-88	20:19:34	4964	3	256	745	754	207	1
S80727.H	15-MAR-88	20:22:58	0	1	256	745	754	207	0
S80728.H	15-MAR-88	20:24:57	0	2	256	745	754	207	0
S80729.H	15-MAR-88	20:26:58	0	3	256	745	754	207	0
S80730.H	15-MAR-88	20:30:36	0	1	256	763	754	207	0
S80731.H	15-MAR-88	20:32:36	0	2	256	763	754	207	0
S80732.H	15-MAR-88	20:36:07	0	3	256	763	754	207	0
S80733.H	16-MAR-88	14:48:17	4964	1	256	732	723	207	1
S80734.H	16-MAR-88	14:51:40	4964	2	256	732	723	207	1
S80735.H	16-MAR-88	14:55:26	4964	3	256	732	723	207	1
S80736.H	16-MAR-88	15:00:52	4964	1	256	714	723	207	1
S80737.H	16-MAR-88	15:03:10	4964	2	256	714	723	207	1
S80738.H	16-MAR-88	15:05:28	4964	3	256	714	723	207	1
S80739.H	16-MAR-88	15:08:15	4964	1	256	723	723	207	1
S80740.H	16-MAR-88	15:10:36	4964	2	256	723	723	207	1
S80741.H	16-MAR-88	15:12:56	4964	3	256	723	723	207	1
S80742.H	17-MAR-88	18:32:39	4964	1	256	721	721	207	1
S80743.H	17-MAR-88	18:34:59	4964	2	256	721	721	207	1
S80744.H	17-MAR-88	18:37:17	4964	3	256	721	721	207	1
S80745.H	17-MAR-88	18:39:51	4964	1	256	730	721	207	1
S80746.H	17-MAR-88	18:42:11	4964	2	256	730	721	207	1
S80747.H	17-MAR-88	18:44:29	4964	3	256	730	721	207	1
S80748.H	17-MAR-88	18:47:28	4964	1	256	733	721	207	1
S80749.H	17-MAR-88	18:49:52	4964	2	256	733	721	207	1
S80750.H	17-MAR-88	18:52:12	4964	3	256	733	721	208	1
S80751.H	17-MAR-88	18:56:21	4964	1	256	711	721	208	1
S80752.H	17-MAR-88	18:59:03	4964	2	256	711	721	208	1
S80753.H	17-MAR-88	19:01:23	4964	3	256	711	721	208	1
S80754.H	17-MAR-88	19:09:19	4964	1	128	729	721	208	1
S80755.H	17-MAR-88	19:12:32	4964	1	128	730	721	208	1
S80756.H	17-MAR-88	19:13:51	4964	2	128	730	721	208	1
S80757.H	17-MAR-88	19:15:12	4964	3	128	730	721	208	1

# MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80758.H	17-MAR-88	19:16:32	4964	1	128	730	721	208	1
S80759.H	17-MAR-88	19:17:52	4964	2	128	730	721	208	1
S80760.H	17-MAR-88	19:19:13	4964	3	128	730	721	208	1
S80761.H	17-MAR-88	19:20:35	4964	1	128	730	721	208	1
S80762.H	17-MAR-88	19:21:57	4964	2	128	730	721	208	1
S80763.H	17-MAR-88	19:23:18	4964	3	128	730	721	208	1
S80764.H	17-MAR-88	19:24:42	4964	1	128	730	721	208	1
S80765.H	17-MAR-88	19:26:04	4964	2	128	730	721	208	1
S80766.H	17-MAR-88	19:27:25	4964	3	128	730	721	208	1
S80767.H	17-MAR-88	19:28:45	4964	1	128	730	721	208	1
S80768.H	17-MAR-88	19:30:07	4964	2	128	730	721	208	1
S80769.H	17-MAR-88	19:31:28	4964	3	128	730	721	208	1
S80770.H	17-MAR-88	19:32:48	4964	1	128	730	721	208	1
S80771.H	17-MAR-88	19:34:09	4964	2	128	730	721	208	1
S80772.H	17-MAR-88	19:35:30	4964	3	128	730	721	208	1
S80773.H	17-MAR-88	19:36:50	4964	1	128	730	721	208	1
S80774.H	17-MAR-88	19:38:11	4964	2	128	730	721	208	1
S80775.H	17-MAR-88	19:39:31	4964	3	128	730	721	208	1
S80776.H	17-MAR-88	19:40:52	4964	1	128	730	721	208	1
S80777.H	17-MAR-88	19:42:13	4964	2	128	730	721	208	1
S80778.H	17-MAR-88	19:43:34	4964	3	128	730	721	208	1
S80779.H	17-MAR-88	19:44:54	4964	1	128	730	721	208	1
S80780.H	17-MAR-88	19:46:15	4964	2	128	730	721	208	1
S80781.H	17-MAR-88	19:47:35	4964	3	128	730	721	208	1
S80782.H	17-MAR-88	19:48:55	4964	1	128	730	721	208	1
S80783.H	17-MAR-88	19:50:16	4964	2	128	730	721	208	1
S80784.H	17-MAR-88	19:51:35	4964	3	128	730	721	208	1
S80785.H	17-MAR-88	19:52:56	4964	1	128	730	721	208	1
S80786.H	17-MAR-88	19:54:16	4964	2	128	730	721	208	1
S80787.H	17-MAR-88	19:55:35	4964	3	128	730	721	208	1
S80788.H	17-MAR-88	19:56:55	4964	1	128	730	721	208	1
S80789.H	17-MAR-88	19:58:16	4964	2	128	730	721	208	1
S80790.H	17-MAR-88	19:59:35	4964	3	128	730	721	208	1
S80791.H	17-MAR-88	20:00:55	4964	1	128	730	721	208	1
S80792.H	17-MAR-88	20:02:15	4964	2	128	730	721	208	1
S80793.H	17-MAR-88	20:03:35	4964	3	128	730	721	208	1
S80794.H	17-MAR-88	20:04:55	4964	1	128	730	721	208	1
S80795.H	17-MAR-88	20:06:16	4964	2	128	730	721	208	1
S80796.H	17-MAR-88	20:07:35	4964	3	128	730	721	208	1
S80797.H	17-MAR-88	20:08:56	4964	1	128	730	721	208	1
S80798.H	17-MAR-88	20:10:16	4964	2	128	730	721	208	1
S80799.H	17-MAR-88	20:11:36	4964	3	128	730	721	208	1
S80800.H	17-MAR-88	20:12:56	4964	1	128	730	721	209	1
S80801.H	17-MAR-88	20:14:17	4964	2	128	730	721	209	1
S80802.H	17-MAR-88	20:15:36	4964	3	128	730	721	209	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80803.H	17-MAR-88	20:16:57	4964	1	128	730	721	209	1
S80804.H	17-MAR-88	20:18:17	4964	2	128	730	721	209	1
S80805.H	17-MAR-88	20:19:37	4964	3	128	730	721	209	1
S80806.H	17-MAR-88	20:20:57	4964	1	128	730	721	209	1
S80807.H	17-MAR-88	20:22:18	4964	2	128	730	721	209	1
S80808.H	17-MAR-88	20:23:37	4964	3	128	730	721	209	1
S80809.H	17-MAR-88	20:24:58	4964	1	128	730	721	209	1
S80810.H	17-MAR-88	20:26:18	4964	2	128	730	721	209	1
S80811.H	17-MAR-88	20:27:38	4964	3	128	730	721	209	1
S80812.H	17-MAR-88	20:33:13	0	1	128	730	721	209	0
S80813.H	17-MAR-88	20:35:07	0	2	128	730	721	209	0
S80814.H	17-MAR-88	20:36:24	0	3	128	730	721	209	0
S80815.H	17-MAR-88	20:38:43	0	1	128	712	721	209	0
S80816.H	17-MAR-88	20:40:12	0	2	128	712	721	209	0
S80817.H	17-MAR-88	20:41:29	0	3	128	712	721	209	0
S80818.H	17-MAR-88	20:44:45	0	1	256	712	721	209	0
S80819.H	17-MAR-88	20:46:51	0	2	256	712	721	209	0
S80820.H	17-MAR-88	20:48:59	0	3	256	712	721	209	0
S80821.H	17-MAR-88	20:51:41	0	1	256	730	721	209	0
S80822.H	17-MAR-88	20:53:48	0	2	256	730	721	209	0
S80823.H	17-MAR-88	20:55:53	0	3	256	730	721	209	0
S80824.H	17-MAR-88	21:03:30	4964	1	128	712	721	209	1
S80825.H	17-MAR-88	21:05:05	4964	2	128	712	721	209	1
S80826.H	17-MAR-88	21:06:40	4964	3	128	712	721	209	1
S80827.H	17-MAR-88	21:09:48	4964	1	128	730	721	209	1
S80828.H	17-MAR-88	21:11:08	4964	2	128	730	721	209	1
S80829.H	17-MAR-88	21:12:27	4964	3	128	730	721	209	1
S80830.H	17-MAR-88	21:16:43	4964	1	128	730	721	209	1
S80831.H	17-MAR-88	21:18:05	4964	2	128	730	721	209	1
S80832.H	17-MAR-88	21:19:24	4964	3	128	730	721	209	1
S80833.H	17-MAR-88	21:20:44	4964	1	128	730	721	209	1
S80834.H	17-MAR-88	21:22:04	4964	2	128	730	721	209	1
S80835.H	17-MAR-88	21:23:24	4964	3	128	730	721	209	1
S80836.H	17-MAR-88	21:24:46	4964	1	128	730	721	209	1
S80837.H	17-MAR-88	21:26:05	4964	2	128	730	721	209	1
S80838.H	17-MAR-88	21:27:25	4964	3	128	730	721	209	1
S80839.H	17-MAR-88	21:28:45	4964	1	128	730	721	209	1
S80840.H	17-MAR-88	21:30:06	4964	2	128	730	721	209	1
S80841.H	17-MAR-88	21:31:26	4964	3	128	730	721	209	1
S80842.H	17-MAR-88	21:32:47	4964	1	128	730	721	209	1
S80843.H	17-MAR-88	21:34:08	4964	2	128	730	721	209	1
S80844.H	17-MAR-88	21:35:29	4964	3	128	730	721	209	1
S80845.H	17-MAR-88	21:36:49	4964	1	128	730	721	209	1
S80846.H	17-MAR-88	21:38:10	4964	2	128	730	721	209	1
S80847.H	17-MAR-88	21:39:30	4964	3	128	730	721	209	1

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S80848.H	17-MAR-88	21:40:50	4964	1	128	730	721	209	1
S80849.H	17-MAR-88	21:42:09	4964	2	128	730	721	209	1
S80850.H	17-MAR-88	21:43:28	4964	3	128	730	721	210	1
S80851.H	17-MAR-88	21:46:42	4964	1	256	730	721	210	1
S80852.H	17-MAR-88	21:49:08	4964	2	256	730	721	210	1
S80853.H	17-MAR-88	21:55:22	4964	3	256	730	721	210	1
S80854.H	17-MAR-88	21:58:15	4964	1	1	730	721	210	1
S80855.H	17-MAR-88	22:01:52	4964	1	256	712	721	210	1
S80856.H	17-MAR-88	22:04:24	4964	2	256	712	721	210	1
S80857.H	17-MAR-88	22:06:47	4964	3	256	712	721	210	1
S80858.H	17-MAR-88	22:07:55	4964	1	1	712	721	210	1
S80859.H	17-MAR-88	22:11:16	4964	1	256	712	721	210	1
S80860.H	17-MAR-88	22:17:09	4964	1	256	712	721	210	1
S80861.H	17-MAR-88	22:19:28	4964	2	256	712	721	210	1
S80862.H	17-MAR-88	22:21:49	4964	3	256	712	721	210	1
S80863.H	17-MAR-88	22:24:34	4964	1	256	721	721	210	1
S80864.H	17-MAR-88	22:26:57	4964	2	256	721	721	210	1
S80865.H	17-MAR-88	22:29:17	4964	3	256	721	721	210	1
S80866.H	17-MAR-88	22:32:16	4964	1	256	730	721	210	1
S80867.H	17-MAR-88	22:34:46	4964	2	256	730	721	210	1
S80868.H	17-MAR-88	22:37:12	4964	3	256	730	721	210	1
S80869.H	17-MAR-88	22:39:56	4964	1	256	733	721	210	1
S80870.H	17-MAR-88	22:42:15	4964	2	256	733	721	210	1
S80871.H	17-MAR-88	22:44:37	4964	3	256	733	721	210	1
S80872.H	17-MAR-88	22:48:05	4964	1	256	733	721	210	1
S80873.H	17-MAR-88	22:51:21	0	1	256	730	721	210	0
S80874.H	17-MAR-88	22:53:33	0	2	256	730	721	210	0
S80875.H	17-MAR-88	22:55:54	0	3	256	730	721	210	0
S80876.H	17-MAR-88	22:58:36	0	1	256	712	721	210	0
S80877.H	17-MAR-88	23:00:51	0	2	256	712	721	210	0
S80878.H	17-MAR-88	23:03:44	0	3	256	712	721	210	0
S80879.H	17-MAR-88	23:06:02	0	1	256	712	721	210	0
S80880.H	17-MAR-88	23:11:37	0	1	256	730	721	210	0
S80881.H	19-MAR-88	14:43:55	4964	1	128	736	727	210	1
S80882.H	19-MAR-88	14:46:22	4965	1	128	736	727	210	1
S80883.H	19-MAR-88	14:47:50	4965	2	128	736	727	210	1
S80884.H	19-MAR-88	14:49:17	4965	3	128	736	727	210	1
S80885.H	19-MAR-88	14:54:59	4965	1	128	713	722	210	1
S80886.H	19-MAR-88	14:56:27	4965	2	128	713	722	210	1
S80887.H	19-MAR-88	14:57:52	4965	3	128	713	722	210	1
S80888.H	19-MAR-88	15:08:01	4967	1	128	728	719	210	1
S80889.H	19-MAR-88	15:09:26	4967	2	128	728	719	210	1
S80890.H	19-MAR-88	15:10:52	4967	3	128	728	719	210	1
S80891.H	19-MAR-88	15:12:59	4967	1	128	710	719	210	1
S80892.H	19-MAR-88	15:14:24	4967	2	128	710	719	210	1

MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80893.H	19-MAR-88	15:17:51	4967	3	128	710	719	210	1
S80894.H	19-MAR-88	15:37:45	4964	1	128	730	721	210	1
S80895.H	19-MAR-88	15:39:26	4964	2	128	730	721	210	1
S80896.H	19-MAR-88	15:42:07	4964	3	128	730	721	210	1
S80897.H	19-MAR-88	15:46:33	4964	1	128	712	721	210	1
S80898.H	19-MAR-88	15:48:08	4964	2	128	712	721	210	1
S80899.H	19-MAR-88	15:51:51	4964	3	128	712	721	210	1
S80900.H	19-MAR-88	15:53:34	4964	1	128	721	721	211	1
S80901.H	19-MAR-88	15:55:02	4964	2	128	721	721	211	1
S80902.H	19-MAR-88	15:57:47	4964	3	128	721	721	211	1
S80903.H	19-MAR-88	16:01:16	4964	1	128	733	721	211	1
S80904.H	19-MAR-88	16:02:46	4964	2	128	733	721	211	1
S80905.H	19-MAR-88	16:12:44	4964	3	128	733	721	211	1
S80906.H	19-MAR-88	16:22:05	4964	1	128	730	721	211	1
S80907.H	19-MAR-88	16:23:45	4964	2	128	730	721	211	1
S80908.H	19-MAR-88	16:25:15	4964	3	128	730	721	211	1
S80909.H	19-MAR-88	16:33:43	4964	1	128	712	721	211	1
S80910.H	19-MAR-88	16:38:39	4964	2	128	712	721	211	1
S80911.H	19-MAR-88	16:40:07	4964	3	128	712	721	211	1
S80912.H	19-MAR-88	16:41:58	4964	1	128	730	721	211	1
S80913.H	19-MAR-88	16:43:28	4964	2	128	730	721	211	1
S80914.H	19-MAR-88	16:46:36	4964	3	128	730	721	211	1
S80915.H	19-MAR-88	16:48:09	4964	1	128	730	721	211	1
S80916.H	19-MAR-88	16:49:38	4964	2	128	730	721	211	1
S80917.H	19-MAR-88	16:51:12	4964	3	128	730	721	211	1
S80918.H	19-MAR-88	17:06:26	4964	1	128	730	721	211	1
S80919.H	19-MAR-88	17:09:52	4964	2	128	730	721	211	1
S80920.H	19-MAR-88	17:12:33	0	1	128	730	721	211	0
S80921.H	19-MAR-88	17:22:37	0	2	128	730	721	211	0
S80922.H	19-MAR-88	17:24:07	0	3	128	730	721	211	0
S80923.H	19-MAR-88	17:25:39	0	1	128	730	721	211	0
S80924.H	19-MAR-88	17:35:20	0	2	128	730	721	211	0
S80925.H	19-MAR-88	17:36:51	0	3	128	730	721	211	0
S80926.H	19-MAR-88	17:41:35	0	1	128	730	721	211	0
S80927.H	19-MAR-88	18:48:09	0	1	128	730	721	211	0
S80928.H	19-MAR-88	19:00:42	0	2	128	730	721	211	0
S80929.H	19-MAR-88	19:02:12	0	3	128	730	721	211	0
S80930.H	20-MAR-88	13:55:25	4965	1	128	728	719	211	1
S80931.H	20-MAR-88	13:56:50	4965	2	128	728	719	211	1
S80932.H	20-MAR-88	13:58:17	4965	3	128	728	719	211	1
S80933.H	20-MAR-88	14:01:44	4965	1	128	710	719	211	1
S80934.H	20-MAR-88	14:03:07	4965	2	128	710	719	211	1
S80935.H	20-MAR-88	14:04:32	4965	3	128	710	719	211	1
S80936.H	20-MAR-88	14:13:40	4964	1	128	730	721	211	1
S80937.H	20-MAR-88	14:15:07	4964	2	128	730	721	211	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80938.H	20-MAR-88	14:16:39	4964	3	128	730	721	211	1
S80939.H	20-MAR-88	14:18:32	4964	1	128	733	721	211	1
S80940.H	20-MAR-88	14:20:03	4964	2	128	733	721	211	1
S80941.H	20-MAR-88	14:21:37	4964	3	128	733	721	211	1
S80942.H	20-MAR-88	14:23:57	4964	1	128	730	721	211	1
S80943.H	20-MAR-88	14:25:51	4964	2	128	730	721	211	1
S80944.H	20-MAR-88	14:27:17	4964	3	128	730	721	211	1
S80945.H	20-MAR-88	14:29:12	4964	1	128	711	721	211	1
S80946.H	20-MAR-88	14:30:44	4964	2	128	711	721	211	1
S80947.H	20-MAR-88	14:32:13	4964	3	128	711	721	211	1
S80948.H	20-MAR-88	14:34:05	4964	1	128	721	721	211	1
S80949.H	20-MAR-88	14:35:30	4964	2	128	721	721	211	1
S80950.H	20-MAR-88	14:37:07	4964	3	128	721	721	212	1
S80951.H	20-MAR-88	14:39:29	4964	1	128	730	721	212	1
S80952.H	20-MAR-88	14:40:57	4964	2	128	730	721	212	1
S80953.H	20-MAR-88	14:42:27	4964	3	128	730	721	212	1
S80954.H	20-MAR-88	14:46:53	4964	1	128	730	721	212	1
S80955.H	20-MAR-88	14:48:20	4964	2	128	730	721	212	1
S80956.H	20-MAR-88	14:49:46	4964	3	128	730	721	212	1
S80957.H	20-MAR-88	14:51:51	4964	1	128	711	721	212	1
S80958.H	20-MAR-88	14:54:45	4964	2	128	711	721	212	1
S80959.H	20-MAR-88	14:57:31	4964	3	128	711	721	212	1
S80960.H	20-MAR-88	14:59:07	4964	1	128	711	721	212	1
S80961.H	20-MAR-88	15:00:34	4964	2	128	711	721	212	1
S80962.H	20-MAR-88	15:02:00	4964	3	128	711	721	212	1
S80963.H	20-MAR-88	15:04:02	4964	1	128	730	721	212	1
S80964.H	20-MAR-88	15:05:23	4964	2	128	730	721	212	1
S80965.H	20-MAR-88	15:06:42	4964	3	128	730	721	212	1
S80966.H	20-MAR-88	15:08:04	4964	1	128	730	721	212	1
S80967.H	20-MAR-88	15:09:25	4964	2	128	730	721	212	1
S80968.H	20-MAR-88	15:10:46	4964	3	128	730	721	212	1
S80969.H	20-MAR-88	15:12:06	4964	1	128	730	721	212	1
S80970.H	20-MAR-88	15:13:28	4964	2	128	730	721	212	1
S80971.H	20-MAR-88	15:14:49	4964	3	128	730	721	212	1
S80972.H	20-MAR-88	15:16:10	4964	1	128	730	721	212	1
S80973.H	20-MAR-88	15:17:31	4964	2	128	730	721	212	1
S80974.H	20-MAR-88	15:18:51	4964	3	128	730	721	212	1
S80975.H	20-MAR-88	15:20:11	4964	1	128	730	721	212	1
S80976.H	20-MAR-88	15:21:34	4964	2	128	730	721	212	1
S80977.H	20-MAR-88	15:22:56	4964	3	128	730	721	212	1
S80978.H	20-MAR-88	15:24:17	4964	1	128	730	721	212	1
S80979.H	20-MAR-88	15:25:38	4964	2	128	730	721	212	1
S80980.H	20-MAR-88	15:26:58	4964	3	128	730	721	212	1
S80981.H	20-MAR-88	15:28:19	4964	1	128	730	721	212	1
S80982.H	20-MAR-88	15:29:40	4964	2	128	730	721	212	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S80983.H	20-MAR-88	15:31:01	4964	3	128	730	721	212	1
S80984.H	20-MAR-88	15:32:22	4964	1	128	730	721	212	1
S80985.H	20-MAR-88	15:33:43	4964	2	128	730	721	212	1
S80986.H	20-MAR-88	15:35:03	4964	3	128	730	721	212	1
S80987.H	20-MAR-88	15:36:27	4964	1	128	730	721	212	1
S80988.H	20-MAR-88	15:37:52	4964	2	128	730	721	212	1
S80989.H	20-MAR-88	15:39:13	4964	3	128	730	721	212	1
S80990.H	20-MAR-88	15:40:36	4964	1	128	730	721	212	1
S80991.H	20-MAR-88	15:42:01	4964	2	128	730	721	212	1
S80992.H	20-MAR-88	15:43:24	4964	3	128	730	721	212	1
S80993.H	20-MAR-88	15:44:47	4964	1	128	730	721	212	1
S80994.H	20-MAR-88	15:46:10	4964	2	128	730	721	212	1
S80995.H	20-MAR-88	15:47:31	4964	3	128	730	721	212	1
S80996.H	20-MAR-88	15:48:53	4964	1	128	730	721	212	1
S80997.H	20-MAR-88	15:50:14	4964	2	128	730	721	212	1
S80998.H	20-MAR-88	15:51:34	4964	3	128	730	721	212	1
S80999.H	20-MAR-88	15:52:56	4964	1	128	730	721	212	1
S81000.H	20-MAR-88	15:54:20	4964	2	128	730	721	213	1
S81001.H	20-MAR-88	15:55:41	4964	3	128	730	721	213	1
S81002.H	20-MAR-88	15:57:02	4964	1	128	730	721	213	1
S81003.H	20-MAR-88	15:58:24	4964	2	128	730	721	213	1
S81004.H	20-MAR-88	15:59:45	4964	3	128	730	721	213	1
S81005.H	20-MAR-88	16:01:06	4964	1	128	730	721	213	1
S81006.H	20-MAR-88	16:02:28	4964	2	128	730	721	213	1
S81007.H	20-MAR-88	16:03:48	4964	3	128	730	721	213	1
S81008.H	20-MAR-88	16:07:27	4964	1	128	712	721	213	1
S81009.H	20-MAR-88	16:13:26	4964	1	128	712	721	213	1
S81010.H	20-MAR-88	16:14:53	4964	2	128	712	721	213	1
S81011.H	20-MAR-88	16:16:22	4964	3	128	712	721	213	1
S81012.H	20-MAR-88	16:17:54	4964	1	128	712	721	213	1
S81013.H	20-MAR-88	16:19:20	4964	2	128	712	721	213	1
S81014.H	20-MAR-88	16:22:04	4964	3	128	712	721	213	1
S81015.H	20-MAR-88	16:24:05	4964	1	128	730	721	213	1
S81016.H	20-MAR-88	16:25:26	4964	2	128	730	721	213	1
S81017.H	20-MAR-88	16:26:45	4964	3	128	730	721	213	1
S81018.H	20-MAR-88	16:28:08	4964	1	128	730	721	213	1
S81019.H	20-MAR-88	16:29:29	4964	2	128	730	721	213	1
S81020.H	20-MAR-88	16:30:48	4964	3	128	730	721	213	1
S81021.H	20-MAR-88	16:32:09	4964	1	128	730	721	213	1
S81022.H	20-MAR-88	16:33:31	4964	2	128	730	721	213	1
S81023.H	20-MAR-88	16:35:53	4964	1	128	730	721	213	1
S81024.H	20-MAR-88	16:37:05	4964	2	128	730	721	213	1
S81025.H	20-MAR-88	16:38:17	4964	3	128	730	721	213	1
S81026.H	20-MAR-88	16:39:39	4964	1	128	730	721	213	1
S81027.H	20-MAR-88	16:40:51	4964	2	128	730	721	213	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S81028.H	20-MAR-88	16:42:04	4964	3	128	730	721	213	1
S81029.H	20-MAR-88	16:43:56	4964	1	128	730	721	213	1
S81030.H	20-MAR-88	16:45:18	4964	2	128	730	721	213	1
S81031.H	20-MAR-88	16:46:38	4964	3	128	730	721	213	1
S81032.H	20-MAR-88	16:48:00	4964	1	128	730	721	213	1
S81033.H	20-MAR-88	16:49:21	4964	2	128	730	721	213	1
S81034.H	20-MAR-88	16:50:43	4964	3	128	730	721	213	1
S81035.H	20-MAR-88	16:52:04	4964	1	128	730	721	213	1
S81036.H	20-MAR-88	16:53:26	4964	2	128	730	721	213	1
S81037.H	20-MAR-88	16:54:48	4964	3	128	730	721	213	1
S81038.H	20-MAR-88	16:56:10	4964	1	128	730	721	213	1
S81039.H	20-MAR-88	16:57:33	4964	2	128	730	721	213	1
S81040.H	20-MAR-88	16:58:53	4964	3	128	730	721	213	1
S81041.H	20-MAR-88	17:00:14	4964	1	128	730	721	213	1
S81042.H	20-MAR-88	17:01:36	4964	2	128	730	721	213	1
S81043.H	20-MAR-88	17:02:56	4964	3	128	730	721	213	1
S81044.H	20-MAR-88	17:04:17	4964	1	128	730	721	213	1
S81045.H	20-MAR-88	17:05:38	4964	2	128	730	721	213	1
S81046.H	20-MAR-88	17:06:59	4964	3	128	730	721	213	1
S81047.H	20-MAR-88	17:08:21	4964	1	128	730	721	213	1
S81048.H	20-MAR-88	17:09:43	4964	2	128	730	721	213	1
S81049.H	20-MAR-88	17:11:03	4964	3	128	730	721	213	1
S81050.H	20-MAR-88	17:12:23	4964	1	128	730	721	214	1
S81051.H	20-MAR-88	17:13:44	4964	2	128	730	721	214	1
S81052.H	20-MAR-88	17:15:03	4964	3	128	730	721	214	1
S81053.H	20-MAR-88	17:16:25	4964	1	128	730	721	214	1
S81054.H	20-MAR-88	17:17:47	4964	2	128	730	721	214	1
S81055.H	20-MAR-88	17:19:08	4964	3	128	730	721	214	1
S81056.H	20-MAR-88	17:20:29	4964	1	128	730	721	214	1
S81057.H	20-MAR-88	17:21:51	4964	2	128	730	721	214	1
S81058.H	20-MAR-88	17:23:11	4964	3	128	730	721	214	1
S81059.H	20-MAR-88	17:24:31	4964	1	128	730	721	214	1
S81060.H	20-MAR-88	17:25:53	4964	2	128	730	721	214	1
S81061.H	20-MAR-88	17:27:14	4964	3	128	730	721	214	1
S81062.H	20-MAR-88	17:28:35	4964	1	128	730	721	214	1
S81063.H	20-MAR-88	17:30:00	4964	2	128	730	721	214	1
S81064.H	20-MAR-88	17:31:21	4964	3	128	730	721	214	1
S81065.H	20-MAR-88	17:32:43	4964	1	128	730	721	214	1
S81066.H	20-MAR-88	17:34:04	4964	2	128	730	721	214	1
S81067.H	20-MAR-88	17:35:25	4964	3	128	730	721	214	1
S81068.H	20-MAR-88	17:36:47	4964	1	128	730	721	214	1
S81069.H	20-MAR-88	17:38:07	4964	2	128	730	721	214	1
S81070.H	20-MAR-88	17:39:27	4964	3	128	730	721	214	1
S81071.H	20-MAR-88	17:44:02	4964	1	128	712	721	214	1
S81072.H	20-MAR-88	17:45:35	4964	2	128	712	721	214	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S81073.H	20-MAR-88	17:47:10	4964	3	128	712	721	214	1
S81074.H	20-MAR-88	17:50:02	4964	1	128	730	721	214	1
S81075.H	20-MAR-88	17:51:24	4964	2	128	730	721	214	1
S81076.H	20-MAR-88	17:52:44	4964	3	128	730	721	214	1
S81077.H	20-MAR-88	17:54:04	4964	1	128	730	721	214	1
S81078.H	20-MAR-88	17:55:25	4964	2	128	730	721	214	1
S81079.H	20-MAR-88	17:56:46	4964	3	128	730	721	214	1
S81080.H	20-MAR-88	17:58:10	4964	1	128	730	721	214	1
S81081.H	20-MAR-88	17:59:33	4964	2	128	730	721	214	1
S81082.H	20-MAR-88	18:00:55	4964	3	128	730	721	214	1
S81083.H	20-MAR-88	18:02:17	4964	1	128	730	721	214	1
S81084.H	20-MAR-88	18:03:41	4964	2	128	730	721	214	1
S81085.H	20-MAR-88	18:05:01	4964	3	128	730	721	214	1
S81086.H	20-MAR-88	18:06:23	4964	1	128	730	721	214	1
S81087.H	20-MAR-88	18:07:44	4964	2	128	730	721	214	1
S81088.H	20-MAR-88	18:09:05	4964	3	128	730	721	214	1
S81089.H	20-MAR-88	18:10:26	4964	1	128	730	721	214	1
S81090.H	20-MAR-88	18:11:46	4964	2	128	730	721	214	1
S81091.H	20-MAR-88	18:13:07	4964	3	128	730	721	214	1
S81092.H	20-MAR-88	18:14:29	4964	1	128	730	721	214	1
S81093.H	20-MAR-88	18:15:51	4964	2	128	730	721	214	1
S81094.H	20-MAR-88	18:17:11	4964	3	128	730	721	214	1
S81095.H	20-MAR-88	18:18:33	4964	1	128	730	721	214	1
S81096.H	20-MAR-88	18:19:57	4964	2	128	730	721	214	1
S81097.H	20-MAR-88	18:21:21	4964	3	128	730	721	214	1
S81098.H	20-MAR-88	18:22:45	4964	1	128	730	721	214	1
S81099.H	20-MAR-88	18:24:10	4964	2	128	730	721	214	1
S81100.H	20-MAR-88	18:25:32	4964	3	128	730	721	215	1
S81101.H	20-MAR-88	18:26:54	4964	1	128	730	721	215	1
S81102.H	20-MAR-88	18:28:16	4964	2	128	730	721	215	1
S81103.H	20-MAR-88	18:29:36	4964	3	128	730	721	215	1
S81104.H	20-MAR-88	18:30:57	4964	1	128	730	721	215	1
S81105.H	20-MAR-88	18:32:20	4964	2	128	730	721	215	1
S81106.H	20-MAR-88	18:33:40	4964	3	128	730	721	215	1
S81107.H	20-MAR-88	18:35:02	4964	1	128	730	721	215	1
S81108.H	20-MAR-88	18:36:24	4964	2	128	730	721	215	1
S81109.H	20-MAR-88	18:37:44	4964	3	128	730	721	215	1
S81110.H	20-MAR-88	18:39:05	4964	1	128	730	721	215	1
S81111.H	20-MAR-88	18:40:26	4964	2	128	730	721	215	1
S81112.H	20-MAR-88	18:41:46	4964	3	128	730	721	215	1
S81113.H	20-MAR-88	18:43:07	4964	1	128	730	721	215	1
S81114.H	20-MAR-88	18:44:28	4964	2	128	730	721	215	1
S81115.H	20-MAR-88	18:45:50	4964	3	128	730	721	215	1
S81116.H	20-MAR-88	18:48:24	4964	1	128	712	721	215	1
S81117.H	20-MAR-88	18:49:53	4964	2	128	712	721	215	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S81118.H	20-MAR-88	18:51:27	4964	3	128	712	721	215	1
S81119.H	20-MAR-88	18:57:13	0	1	256	712	721	215	0
S81120.H	20-MAR-88	18:59:41	0	2	256	712	721	215	0
S81121.H	20-MAR-88	19:02:09	0	3	256	712	721	215	0
S81122.H	20-MAR-88	19:04:53	0	1	256	730	721	215	0
S81123.H	20-MAR-88	19:07:08	0	2	256	730	721	215	0
S81124.H	20-MAR-88	19:09:54	0	3	256	730	721	215	0
S81125.H	20-MAR-88	19:24:38	4964	1	128	730	721	215	1
S81126.H	20-MAR-88	19:26:32	4964	2	128	730	721	215	1
S81127.H	20-MAR-88	19:29:02	4964	3	128	730	721	215	1
S81128.H	20-MAR-88	19:31:43	4964	1	128	730	721	215	1
S81129.H	20-MAR-88	19:33:14	4964	2	128	730	721	215	1
S81130.H	20-MAR-88	19:35:03	4964	3	128	730	721	215	1
S81131.H	20-MAR-88	19:37:24	4964	1	128	712	721	215	1
S81132.H	20-MAR-88	19:38:52	4964	2	128	712	721	215	1
S81133.H	20-MAR-88	19:40:21	4964	3	128	712	721	215	1
S81134.H	20-MAR-88	19:42:09	4964	1	128	721	721	215	1
S81135.H	20-MAR-88	19:43:36	4964	2	128	721	721	215	1
S81136.H	20-MAR-88	19:45:08	4964	3	128	721	721	215	1
S81137.H	20-MAR-88	19:47:03	4964	1	128	733	721	215	1
S81138.H	20-MAR-88	19:48:44	4964	2	128	733	721	215	1
S81139.H	20-MAR-88	19:50:13	4964	3	128	733	721	215	1
S81140.H	20-MAR-88	19:58:36	4964	1	128	730	721	215	1
S81141.H	20-MAR-88	20:00:08	4964	2	128	730	721	215	1
S81142.H	20-MAR-88	20:03:46	4964	3	128	730	721	215	1
S81143.H	20-MAR-88	20:05:58	4964	1	128	711	721	215	1
S81144.H	20-MAR-88	20:07:31	4964	2	128	711	721	215	1
S81145.H	20-MAR-88	20:09:08	4964	3	128	711	721	215	1
S81146.H	20-MAR-88	20:11:36	4964	1	128	711	721	215	1
S81147.H	20-MAR-88	20:13:18	4964	2	128	711	721	215	1
S81148.H	20-MAR-88	20:15:02	4964	3	128	711	721	215	1
S81149.H	20-MAR-88	20:18:01	4964	1	128	730	721	215	1
S81150.H	20-MAR-88	20:19:23	4964	2	128	730	721	216	1
S81151.H	20-MAR-88	20:20:43	4964	3	128	730	721	216	1
S81152.H	20-MAR-88	20:25:32	4964	1	18	730	721	216	1
S81153.H	20-MAR-88	20:26:53	4964	2	18	730	721	216	1
S81154.H	20-MAR-88	20:28:16	4964	3	18	730	721	216	1
S81155.H	20-MAR-88	20:29:39	4964	1	18	730	721	216	1
S81156.H	20-MAR-88	20:31:02	4964	2	18	730	721	216	1
S81157.H	20-MAR-88	20:32:24	4964	3	18	730	721	216	1
S81158.H	20-MAR-88	20:33:48	4964	1	18	730	721	216	1
S81159.H	20-MAR-88	20:35:10	4964	2	18	730	721	216	1
S81160.H	20-MAR-88	20:36:31	4964	3	18	730	721	216	1
S81161.H	20-MAR-88	20:37:53	4964	1	18	730	721	216	1
S81162.H	20-MAR-88	20:39:14	4964	2	18	730	721	216	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S81163.H	20-MAR-88	20:40:35	4964	3	18	730	721	216	1
S81164.H	20-MAR-88	20:41:57	4964	1	18	730	721	216	1
S81165.H	20-MAR-88	20:43:24	4964	2	18	730	721	216	1
S81166.H	20-MAR-88	20:44:47	4964	3	18	730	721	216	1
S81167.H	20-MAR-88	20:49:55	0	3	256	712	721	216	0
S81168.H	20-MAR-88	20:52:44	0	3	256	721	721	216	0
S81169.H	20-MAR-88	20:55:18	0	3	256	730	721	216	0
S81170.H	20-MAR-88	20:57:31	0	3	256	733	721	216	0
S81171.H	20-MAR-88	21:01:16	0	3	256	730	721	216	0
S81172.H	20-MAR-88	21:03:53	0	3	256	730	721	216	0
S81173.H	21-MAR-88	14:48:19	4964	1	256	730	721	216	1
S81174.H	21-MAR-88	14:50:42	4964	2	256	730	721	216	1
S81175.H	21-MAR-88	14:53:01	4964	3	256	730	721	216	1
S81176.H	21-MAR-88	14:56:00	4964	1	256	711	721	216	1
S81177.H	21-MAR-88	14:58:21	4964	2	256	711	721	216	1
S81178.H	21-MAR-88	15:00:42	4964	3	256	711	721	216	1
S81179.H	21-MAR-88	15:06:14	4964	1	256	721	721	216	1
S81180.H	21-MAR-88	15:08:38	4964	2	256	721	721	216	1
S81181.H	21-MAR-88	15:10:57	4964	3	256	721	721	216	1
S81182.H	21-MAR-88	15:15:36	4964	1	256	733	721	216	1
S81183.H	21-MAR-88	15:18:09	4964	2	256	733	721	216	1
S81184.H	21-MAR-88	15:20:29	4964	3	256	733	721	216	1
S81185.H	21-MAR-88	15:23:33	4964	1	256	709	721	216	1
S81186.H	21-MAR-88	15:25:54	4964	2	256	709	721	216	1
S81187.H	21-MAR-88	15:28:14	4964	3	256	709	721	216	1
S81188.H	21-MAR-88	15:47:25	0	1	256	729	216	1	1
S81189.H	21-MAR-88	15:52:56	4965	2	256	729	720	216	1
S81190.H	21-MAR-88	15:55:17	4965	3	256	729	720	216	1
S81192.H	21-MAR-88	16:05:37	4965	2	256	711	720	216	1
S81193.H	21-MAR-88	16:07:58	4965	3	256	711	720	216	1
S81194.H	21-MAR-88	16:30:50	4965	1	256	720	720	216	1
S81195.H	21-MAR-88	16:33:28	4965	2	256	720	720	216	1
S81196.H	21-MAR-88	16:35:49	4965	3	256	720	720	216	1
S81197.H	21-MAR-88	16:40:07	0	3	256	721	721	216	0
S81198.H	21-MAR-88	16:42:29	0	3	256	730	721	216	0
S81199.H	21-MAR-88	16:45:08	0	3	256	712	721	216	0
S81200.H	21-MAR-88	16:48:13	0	3	256	709	721	217	0
S81201.H	21-MAR-88	16:50:58	0	3	256	733	721	217	0
S81202.H	21-MAR-88	17:11:35	4972	1	256	732	723	217	1
S81203.H	21-MAR-88	17:13:56	4972	2	256	732	723	217	1
S81204.H	21-MAR-88	17:16:16	4972	3	256	732	723	217	1
S81205.H	21-MAR-88	17:19:22	4972	1	256	713	723	217	1
S81206.H	21-MAR-88	17:21:42	4972	2	256	713	723	217	1
S81207.H	21-MAR-88	17:24:05	4972	3	256	713	723	217	1
S81208.H	21-MAR-88	17:33:02	4972	1	256	714	730	217	1

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
S81209.H	21-MAR-88	17:37:28	4964	1	128	730	721	217	1
S81210.H	21-MAR-88	17:39:10	4964	2	128	730	721	217	1
S81211.H	21-MAR-88	17:40:28	4964	3	128	730	721	217	1
S81212.H	21-MAR-88	17:42:39	4964	1	128	712	721	217	1
S81213.H	21-MAR-88	17:44:10	4964	2	128	712	721	217	1
S81214.H	21-MAR-88	17:49:28	4964	3	128	712	721	217	1
S81215.H	21-MAR-88	17:53:19	4964	1	256	712	721	217	1
S81216.H	21-MAR-88	17:56:59	4964	2	256	712	721	217	1
S81217.H	21-MAR-88	17:59:29	4964	3	256	712	721	217	1
S81218.H	21-MAR-88	18:02:58	4964	1	256	730	721	217	1
S81219.H	21-MAR-88	18:05:29	4964	2	256	730	721	217	1
S81220.H	21-MAR-88	18:07:58	4964	3	256	730	721	217	1
S81221.H	21-MAR-88	18:10:58	4964	1	256	730	721	217	1
S81222.H	21-MAR-88	18:13:20	4964	2	256	730	721	217	1
S81223.H	21-MAR-88	18:15:39	4964	3	256	730	721	217	1
S81224.H	21-MAR-88	18:18:03	4964	1	256	730	721	217	1
S81225.H	21-MAR-88	18:20:27	4964	2	256	730	721	217	1
S81226.H	21-MAR-88	18:22:45	4964	3	256	730	721	217	1
S81227.H	21-MAR-88	18:25:06	4964	1	256	730	721	217	1
S81228.H	21-MAR-88	18:27:26	4964	2	256	730	721	217	1
S81229.H	21-MAR-88	18:29:44	4964	3	256	730	721	217	1
S81230.H	21-MAR-88	18:32:02	4964	1	256	730	721	217	1
S81231.H	21-MAR-88	18:34:22	4964	2	256	730	721	217	1
S81232.H	21-MAR-88	18:36:44	4964	3	256	730	721	217	1
S81233.H	21-MAR-88	18:39:05	4964	1	256	730	721	217	1
S81234.H	21-MAR-88	18:41:25	4964	2	256	730	721	217	1
S81235.H	21-MAR-88	18:43:44	4964	3	256	730	721	217	1
S81236.H	21-MAR-88	18:46:05	4964	1	256	730	721	217	1
S81237.H	21-MAR-88	18:48:26	4964	2	256	730	721	217	1
S81238.H	21-MAR-88	18:50:46	4964	3	256	730	721	217	1
S81239.H	21-MAR-88	18:56:28	4964	1	218	730	721	217	1
S81240.H	21-MAR-88	18:58:46	4964	2	218	730	721	217	1
S81241.H	21-MAR-88	19:01:02	4964	3	218	730	721	217	1
S81242.H	21-MAR-88	19:03:22	4964	1	218	730	721	217	1
S81243.H	21-MAR-88	19:05:40	4964	2	218	730	721	217	1
S81244.H	21-MAR-88	19:07:57	4964	3	218	730	721	217	1
S81245.H	21-MAR-88	19:10:14	4964	1	218	730	721	217	1
S81246.H	21-MAR-88	19:12:31	4964	2	218	730	721	217	1
S81247.H	21-MAR-88	19:14:51	4964	3	218	730	721	217	1
S81248.H	21-MAR-88	19:17:10	4964	1	218	730	721	217	1
S81249.H	21-MAR-88	19:19:30	4964	2	218	730	721	217	1
S81250.H	21-MAR-88	19:21:50	4964	3	218	730	721	218	1
S81251.H	21-MAR-88	19:34:30	4964	1	256	730	721	218	1
S81252.H	21-MAR-88	19:37:01	4964	2	256	730	721	218	1
S81253.H	21-MAR-88	19:39:26	4964	3	256	730	721	218	1

**MAGNETOGRAPH OBSERVATIONS**

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S81254.H	21-MAR-88	19:42:38	4964	1	256	712	721	218	1
S81255.H	21-MAR-88	19:45:13	4964	2	256	712	721	218	1
S81256.H	21-MAR-88	19:47:36	4964	3	256	712	721	218	1
S81257.H	21-MAR-88	19:50:23	4964	1	256	721	721	218	1
S81258.H	21-MAR-88	19:53:04	4964	2	256	721	721	218	1
S81259.H	21-MAR-88	19:55:26	4964	3	256	721	721	218	1
S81260.H	21-MAR-88	20:06:14	4972	1	256	731	723	218	1
S81261.H	21-MAR-88	20:08:42	4972	2	256	731	723	218	1
S81262.H	21-MAR-88	20:11:51	4972	3	256	731	723	218	1
S81263.H	21-MAR-88	20:15:06	4972	1	256	714	723	218	1
S81264.H	21-MAR-88	20:17:30	4972	2	256	714	723	218	1
S81265.H	21-MAR-88	20:19:52	4972	3	256	714	723	218	1
S81266.H	21-MAR-88	20:22:39	4972	1	256	723	723	218	1
S81267.H	21-MAR-88	20:25:03	4972	2	256	723	723	218	1
S81268.H	21-MAR-88	20:27:13	4972	3	256	723	723	218	0
S81269.H	21-MAR-88	20:31:12	0	3	256	721	721	218	0
S81270.H	21-MAR-88	20:33:51	0	3	256	712	721	218	0
S81271.H	21-MAR-88	20:36:36	0	3	256	730	721	218	0
S81272.H	21-MAR-88	20:52:19	4964	1	256	712	721	218	1
S81273.H	21-MAR-88	20:54:44	4964	2	256	712	721	218	1
S81274.H	21-MAR-88	20:57:14	4964	3	256	712	721	218	1
S81275.H	21-MAR-88	21:00:46	4964	1	256	730	721	218	1
S81276.H	21-MAR-88	21:06:47	0	1	256	730	721	218	0
S81277.H	21-MAR-88	21:12:40	0	1	256	730	721	218	0
S81278.H	22-MAR-88	15:16:03	4964	1	256	730	721	218	1
S81279.H	22-MAR-88	15:18:45	4964	2	256	730	721	218	1
S81280.H	22-MAR-88	15:21:09	4964	3	256	730	721	218	1
S81281.H	22-MAR-88	15:24:02	4964	1	256	712	721	218	1
S81282.H	22-MAR-88	15:26:24	4964	2	256	712	721	218	1
S81283.H	22-MAR-88	15:28:45	4964	3	256	712	721	218	1
S81284.H	22-MAR-88	15:31:31	4964	1	256	721	721	218	1
S81285.H	22-MAR-88	15:33:52	4964	2	256	721	721	218	1
S81286.H	22-MAR-88	15:36:54	4964	3	256	721	721	218	1
S81287.H	22-MAR-88	15:48:59	4972	1	256	731	722	218	1
S81288.H	22-MAR-88	15:51:23	4972	2	256	731	722	218	1
S81289.H	22-MAR-88	15:53:45	4972	3	256	731	722	218	1
S81290.H	22-MAR-88	15:57:10	4972	1	256	713	722	218	1
S81291.H	22-MAR-88	15:59:35	4972	2	256	713	722	218	1
S81292.H	22-MAR-88	16:02:00	4972	3	256	713	722	218	1
S81293.H	22-MAR-88	16:04:48	4972	1	256	722	722	218	1
S81294.H	22-MAR-88	16:07:13	4972	2	256	722	722	218	1
S81295.H	22-MAR-88	16:09:34	4972	3	256	722	722	218	1
S81296.H	22-MAR-88	16:14:34	0	3	256	712	722	218	0
S81297.H	22-MAR-88	16:16:56	0	3	256	721	722	218	0
S81298.H	22-MAR-88	16:19:24	0	3	256	730	722	218	0

### MAGNETOGRAPH OBSERVATIONS

FILE-NAME	DATE	TIME	REGION	λP	ENH	FP	CF	TAPE	C.T.
S81299.H	22-MAR-88	16:22:25	0	3	256	730	722	218	0
S81300.H	22-MAR-88	16:30:38	4972	1	256	731	722	219	1
S81301.H	22-MAR-88	16:33:05	4972	2	256	731	722	219	1
S81302.H	22-MAR-88	16:35:21	4972	3	256	731	722	219	1
S81303.H	22-MAR-88	16:42:22	4964	1	256	731	722	219	1
S81304.H	22-MAR-88	16:44:49	4964	2	256	731	722	219	1
S81305.H	22-MAR-88	16:47:06	4964	3	256	731	722	219	1
S81306.H	22-MAR-88	16:50:10	4964	1	256	712	722	219	1
S81307.H	22-MAR-88	16:52:25	4964	2	256	712	722	219	1
S81308.H	22-MAR-88	16:54:41	4964	3	256	712	722	219	1
S81309.H	22-MAR-88	16:58:21	4964	1	256	731	722	219	1
S81310.H	22-MAR-88	17:00:40	4964	2	256	731	722	219	1
S81311.H	22-MAR-88	17:03:01	4964	3	256	731	722	219	1
S81312.H	22-MAR-88	17:05:21	4964	1	256	731	722	219	1
S81313.H	22-MAR-88	17:07:40	4964	2	256	731	722	219	1
S81314.H	22-MAR-88	17:10:00	4964	3	256	731	722	219	1
S81315.H	22-MAR-88	17:12:19	4964	1	256	731	722	219	1
S81316.H	22-MAR-88	17:14:38	4964	2	256	731	722	219	1
S81317.H	22-MAR-88	17:16:57	4964	3	256	731	722	219	1
S81318.H	22-MAR-88	17:19:16	4964	1	256	731	722	219	1
S81319.H	22-MAR-88	17:21:34	4964	2	256	731	722	219	1
S81320.H	22-MAR-88	17:23:53	4964	3	256	731	722	219	1
S81321.H	22-MAR-88	17:26:13	4964	1	256	731	722	219	1
S81322.H	22-MAR-88	17:28:32	4964	2	256	731	722	219	1
S81323.H	22-MAR-88	17:30:51	4964	3	256	731	722	219	1
S81324.H	22-MAR-88	17:33:10	4964	1	256	731	722	219	1
S81325.H	22-MAR-88	17:35:29	4964	2	256	731	722	219	1
S81326.H	22-MAR-88	17:37:47	4964	3	256	731	722	219	1
S81327.H	22-MAR-88	17:40:07	4964	1	256	731	722	219	1
S81328.H	22-MAR-88	17:42:25	4964	2	256	731	722	219	1
S81329.H	22-MAR-88	17:44:43	4964	3	256	731	722	219	1
S81330.H	22-MAR-88	17:47:03	4964	1	256	731	722	219	1
S81331.H	22-MAR-88	17:49:21	4964	2	256	731	722	219	1
S81332.H	22-MAR-88	17:51:40	4964	3	256	731	722	219	1
S81333.H	22-MAR-88	17:53:59	4964	1	256	731	722	219	1
S81334.H	22-MAR-88	17:56:18	4964	2	256	731	722	219	1
S81335.H	22-MAR-88	17:58:36	4964	3	256	731	722	219	1
S81336.H	22-MAR-88	18:01:56	4964	1	256	713	722	219	1
S81337.H	22-MAR-88	18:04:21	4964	2	256	713	722	219	1
S81338.H	22-MAR-88	18:06:45	4964	3	256	713	722	219	1
S81339.H	22-MAR-88	18:09:40	4964	1	256	731	722	219	1
S81340.H	22-MAR-88	18:11:59	4964	2	256	731	722	219	1
S81341.H	22-MAR-88	18:14:18	4964	3	256	731	722	219	1
S81342.H	22-MAR-88	18:16:36	4964	1	256	731	722	219	1
S81343.H	22-MAR-88	18:18:55	4964	2	256	731	722	219	1

### MAGNETOGRAPH OBSERVATIONS

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S81345.H	22-MAR-88	18:23:33	4964	1	256	731	722	219	1
S81346.H	22-MAR-88	18:25:52	4964	2	256	731	722	219	1
S81347.H	22-MAR-88	18:28:11	4964	3	256	731	722	219	1
S81348.H	22-MAR-88	18:30:30	4964	1	256	731	722	219	1
S81349.H	22-MAR-88	18:32:49	4964	2	256	731	722	219	1
S81350.H	22-MAR-88	18:35:08	4964	3	256	731	722	220	1
S81351.H	22-MAR-88	18:37:27	4964	1	256	731	722	220	1
S81352.H	22-MAR-88	18:39:46	4964	2	256	731	722	220	1
S81353.H	22-MAR-88	18:42:06	4964	3	256	731	722	220	1
S81354.H	22-MAR-88	18:44:25	4964	1	256	731	722	220	1
S81355.H	22-MAR-88	18:46:44	4964	2	256	731	722	220	1
S81356.H	22-MAR-88	18:49:03	4964	3	256	731	722	220	1
S81357.H	22-MAR-88	18:51:22	4964	1	256	731	722	220	1
S81358.H	22-MAR-88	18:53:40	4964	2	256	731	722	220	1
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S81360.H	22-MAR-88	18:58:19	4964	1	256	731	722	220	1
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S81362.H	22-MAR-88	19:02:56	4964	3	256	731	722	220	1
S81363.H	22-MAR-88	19:05:15	4964	1	256	731	722	220	1
S81364.H	22-MAR-88	19:07:34	4964	2	256	731	722	220	1
S81365.H	22-MAR-88	19:09:53	4964	3	256	731	722	220	1
S81366.H	22-MAR-88	19:12:12	4964	1	256	731	722	220	1
S81367.H	22-MAR-88	19:14:31	4964	2	256	731	722	220	1
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S81369.H	22-MAR-88	19:19:11	4964	1	256	731	722	220	1
S81370.H	22-MAR-88	19:23:11	4964	1	68	731	722	220	1
S81371.H	22-MAR-88	19:25:29	4964	2	68	731	722	220	1
S81372.H	22-MAR-88	19:27:48	4964	3	68	731	722	220	1
S81373.H	22-MAR-88	19:30:07	4964	1	68	731	722	220	1
S81374.H	22-MAR-88	19:32:26	4964	2	68	731	722	220	1
S81375.H	22-MAR-88	19:34:44	4964	3	68	731	722	220	1
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S81377.H	22-MAR-88	19:40:40	4964	2	9	713	722	220	1
S81378.H	22-MAR-88	19:42:59	4964	3	9	713	722	220	1
S81379.H	22-MAR-88	19:46:37	0	3	256	713	722	220	0
S81380.H	22-MAR-88	19:49:08	0	3	256	722	722	220	0
S81381.H	22-MAR-88	19:51:54	0	3	256	731	722	220	0
S81382.H	22-MAR-88	19:54:44	0	3	256	731	722	220	0
S81383.H	22-MAR-88	20:04:57	4972	1	256	731	722	220	1
S81384.H	22-MAR-88	20:07:20	4972	2	256	731	722	220	1
S81385.H	22-MAR-88	20:09:41	4972	3	256	731	722	220	1
S81386.H	22-MAR-88	20:12:39	4972	1	256	713	722	220	1
S81387.H	22-MAR-88	20:15:01	4972	2	256	713	722	220	1
S81388.H	22-MAR-88	20:17:22	4972	3	256	713	722	220	1

**MAGNETOGRAPH OBSERVATIONS**

FILE-NAME	DATE	TIME	REGION	$\lambda P$	ENH	FP	CF	TAPE	C.T.
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S81392.H	22-MAR-88	20:37:57	4964	1	256	730	721	220	1
S81393.H	22-MAR-88	20:40:19	4964	2	256	730	721	220	1
S81394.H	22-MAR-88	20:42:40	4964	3	256	730	721	220	1
S81395.H	22-MAR-88	20:45:45	4964	1	256	712	721	220	1
S81396.H	22-MAR-88	20:48:07	4964	2	256	712	721	220	1
S81397.H	22-MAR-88	20:50:39	4964	3	256	712	721	220	1
S81398.H	22-MAR-88	20:55:32	4964	1	256	721	721	220	1
S81399.H	22-MAR-88	20:57:44	4964	2	256	721	721	220	1
S81400.H	22-MAR-88	20:59:56	4964	3	256	721	721	221	1
S81401.H	22-MAR-88	21:02:52	0	3	256	712	721	221	0
S81402.H	22-MAR-88	21:05:15	0	3	256	721	721	221	0
S81403.H	22-MAR-88	21:07:59	0	3	256	729	721	221	0
S81404.H	22-MAR-88	21:10:24	0	3	256	729	721	221	0

**Appendix B:  
H-Alpha Observations**

H-ALPHA OBSERVATIONS

DATE	TIME	EXPS	WEATHER
02-09-88	1905-1912 1925-2112	11 EACH 5-MIN	CLEAR
02-10-88	1451-1453 1453-2114	6 EACH 10-MIN	CLEAR
02-12-88	1951-1952	13	CLEAR
02-16-88	1710 1854-2205	12 EACH 10-MIN	CLEAR
02-17-88	1839 1840-2122	3 EACH 10-MIN	CLEAR
02-20-88	1914	3	CLEAR
02-21-88	1612	6	CLEAR
02-22-88	1512-1514 1514-2015	5 EACH 10-MIN	CLEAR
02-24-88	1911	13	CLEAR
02-26-88	1636-1637	9	HAZY
02-28-88	1906	3	CLEAR
02-29-88	1616-1620 1620-2055	9 EACH 15-MIN	CLEAR

### H-ALPHA OBSERVATIONS

DATE	TIME	EXPS	WEATHER
03-01-88	1414-1946	30	CLEAR
03-02-88	1419-1843	18	CLEAR
03-16-88	1412	6	CLEAR
03-21-88	1419-1420 1850	6 5	CLEAR
03-22-88	1406-1924	23	CLEAR
03-23-88	1416-1417	12	CLEAR
03-27-88	2016	3	CLEAR
03-28-88	1437-1945	16	CLEAR

**Appendix C:**  
**White-Light Observations**

**WHITE-LIGHT OBSERVATIONS**

DATE	TIME	EXPS	WEATHER
01-15-88	1730	2	CLEAR
01-20-88	1400	3	SUNNY
01-25-88	1430 1715	3 2	CLEAR
01-26-88	1905	2	CLEAR
01-27-88	1845	3	CLEAR
01-28-88	1430	3	CLEAR
01-29-88	1700	1	CLEAR

### WHITE-LIGHT OBSERVATIONS

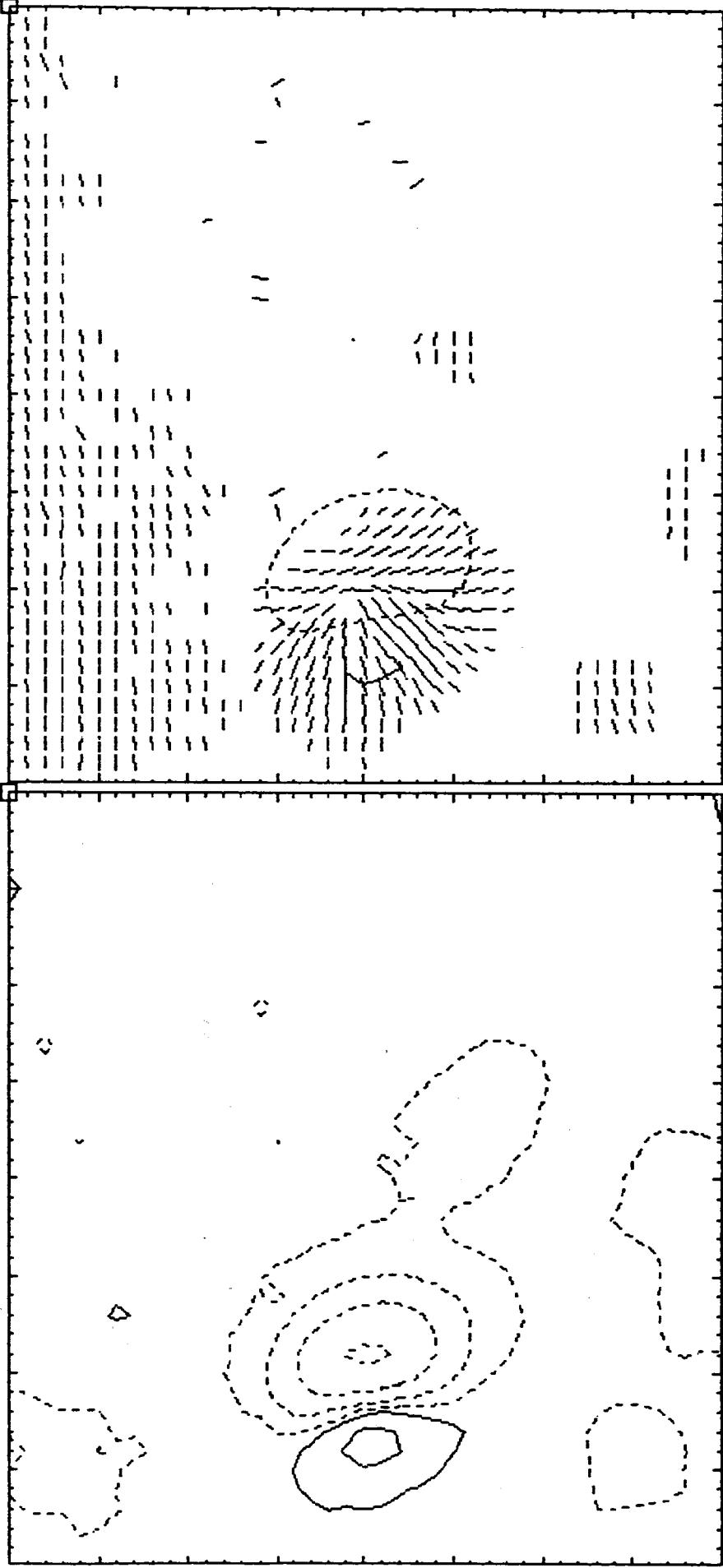
DATE	TIME	EXPS	WEATHER
02-09-88	1910	3	CLEAR
	2110	1	
02-10-88	1455	2	CLEAR
	1923	1	
02-12-88	1548	2	CLEAR
02-16-88	1709	2	CLEAR
	1856	2	CLEAR
02-17-88	1836	2	CLEAR
	1950	1	CLEAR
02-20-88	1905	2	CLEAR
02-21-88	1610	2	CLEAR
02-22-88	1510	2	CLEAR
	2014	1	CLEAR
02-24-88	1910	1	CLEAR
02-26-88	1650	2	CLEAR
02-28-88	1906	1	CLEAR

**WHITE-LIGHT OBSERVATIONS**

DATE	TIME	EXPS	WEATHER
03-16-88	1409	1	CLEAR
	1906	1	
03-17-88	1817	3	CLEAR
03-19-88	1400	1	CLEAR
03-20-88	1653	2	CLEAR
03-21-88	1415	2	CLEAR
	1847	2	
03-22-88	1405	1	CLEAR
	1700	1	
03-23-88	1413	3	CLEAR

**Appendix D:  
MSFC Vector Magnetograms**

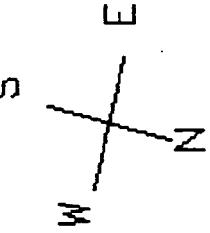
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



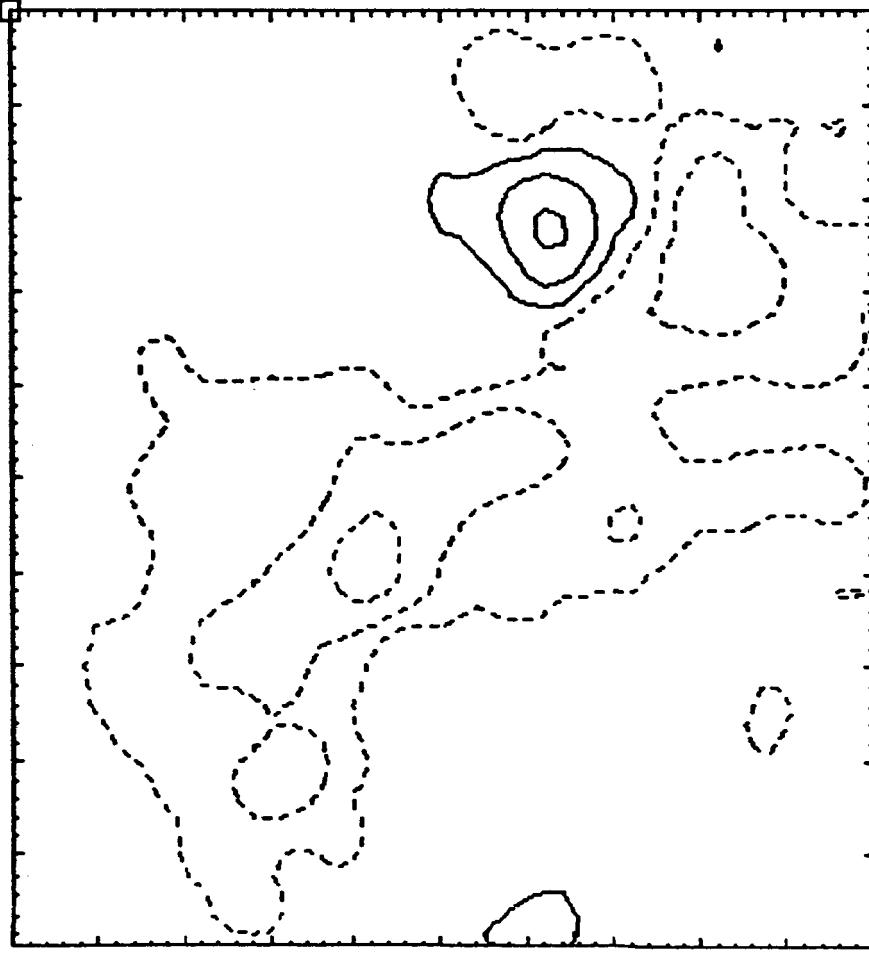
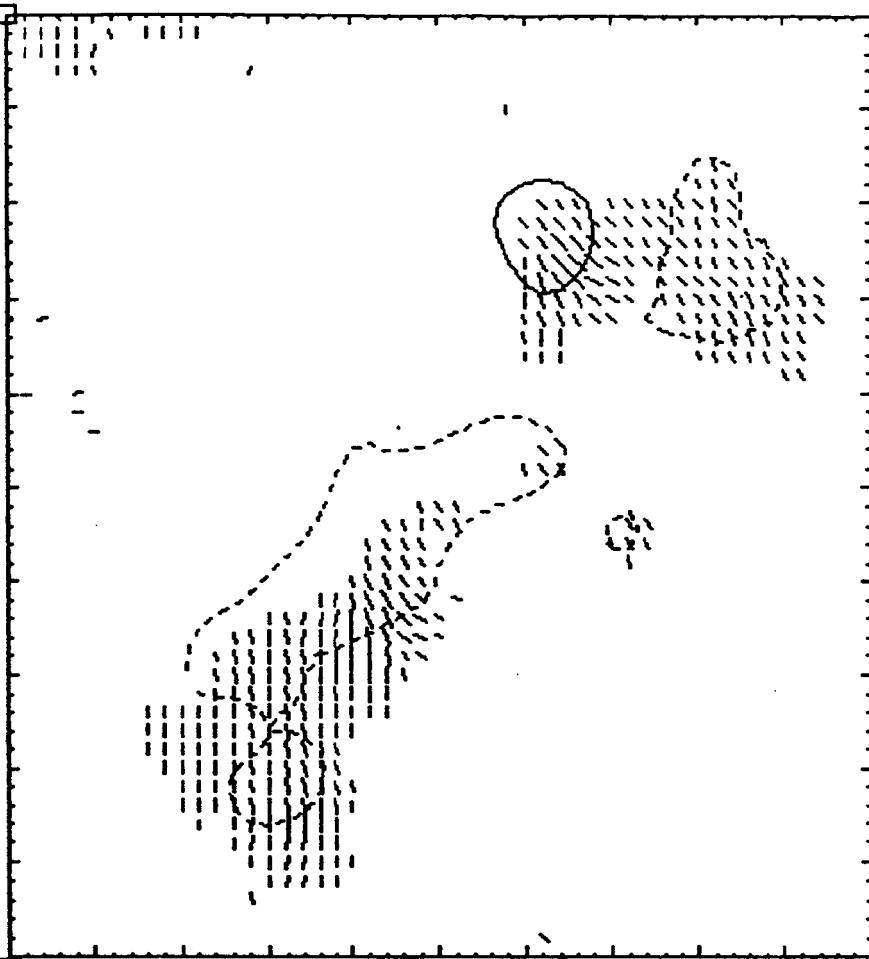
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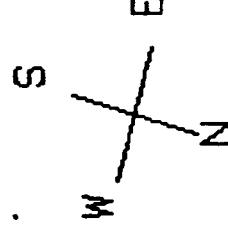
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



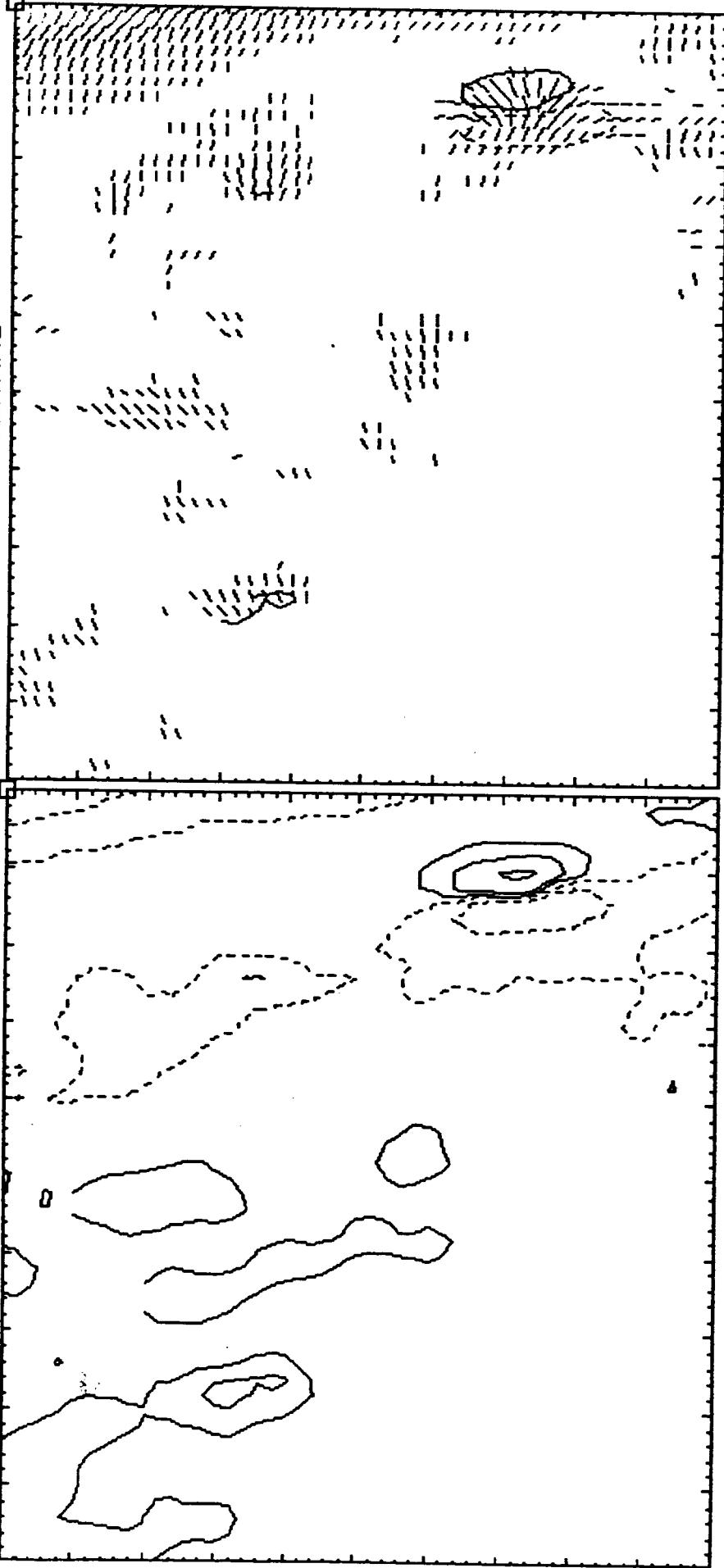
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MEASURED  
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FILE:  
L800+7C.02  
AR # 4946  
TIME 040120:14

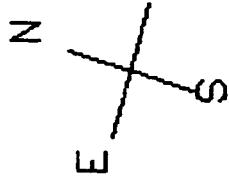


MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



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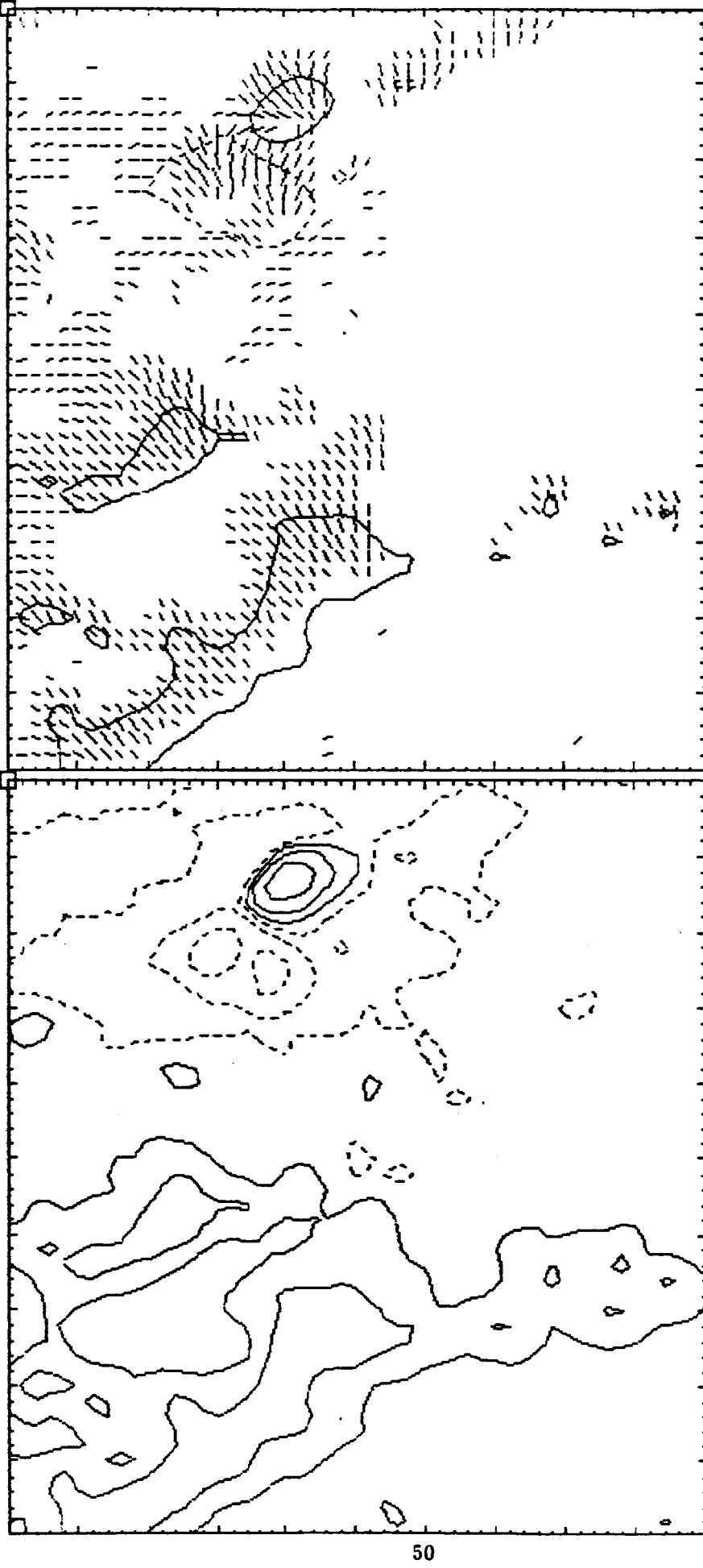
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MEASURED  
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

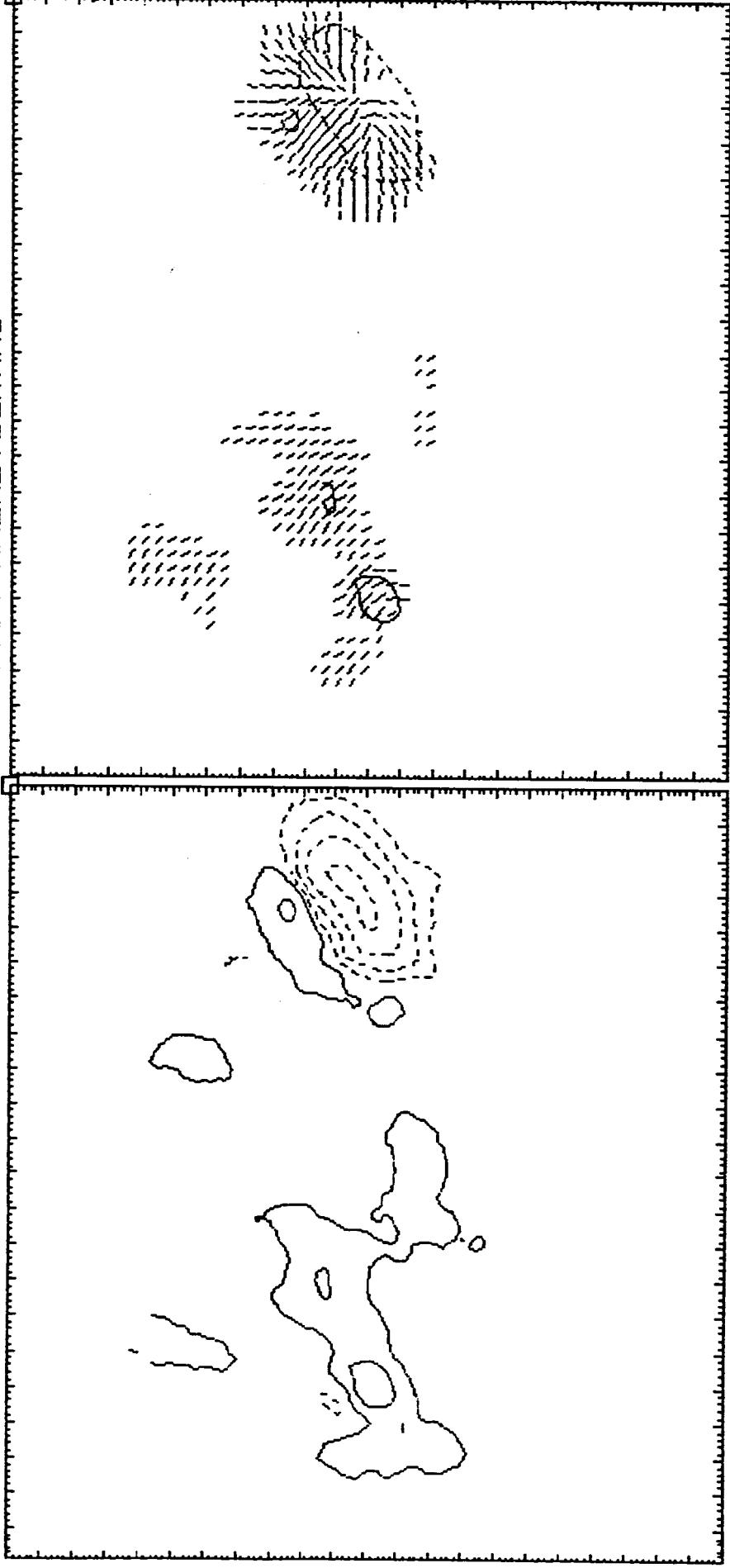


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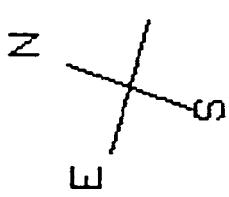
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

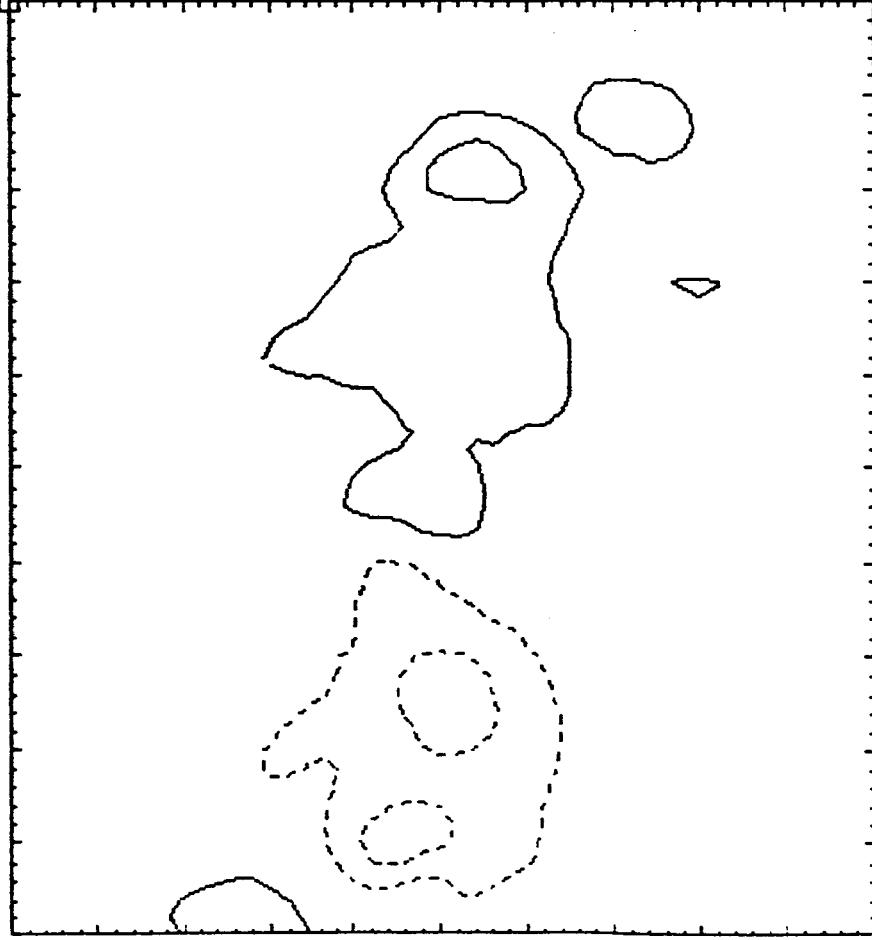
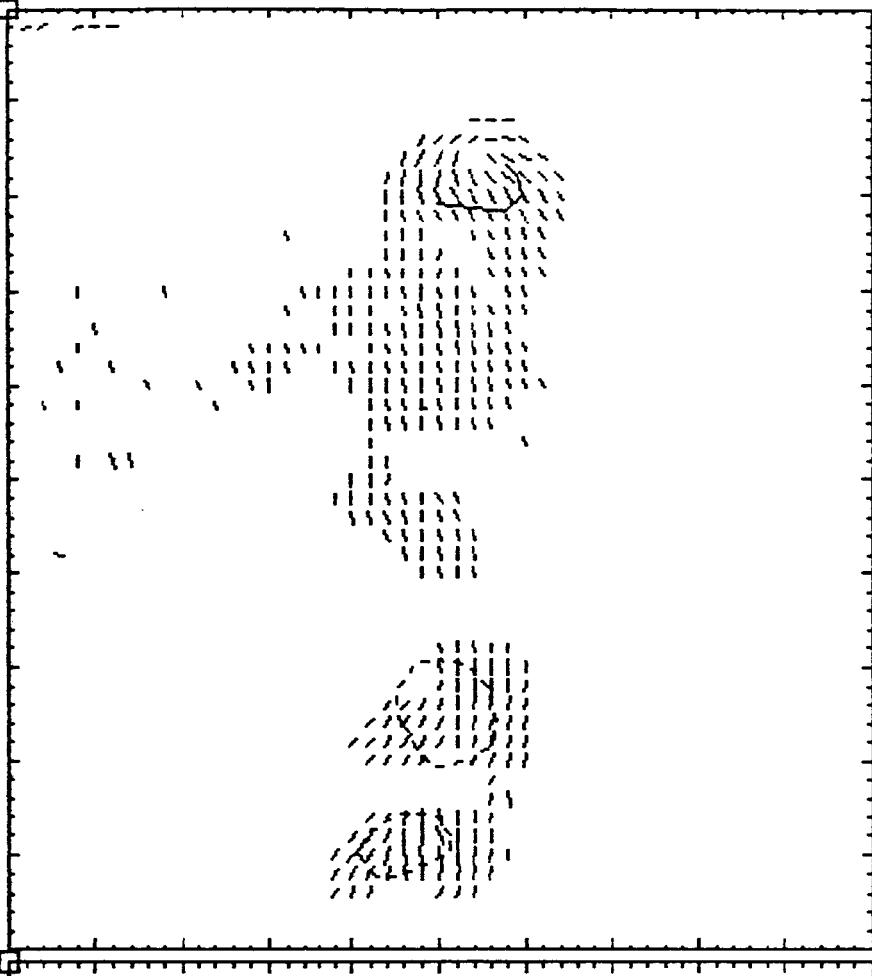


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MEASURED  
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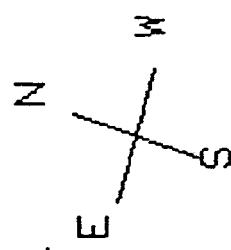
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



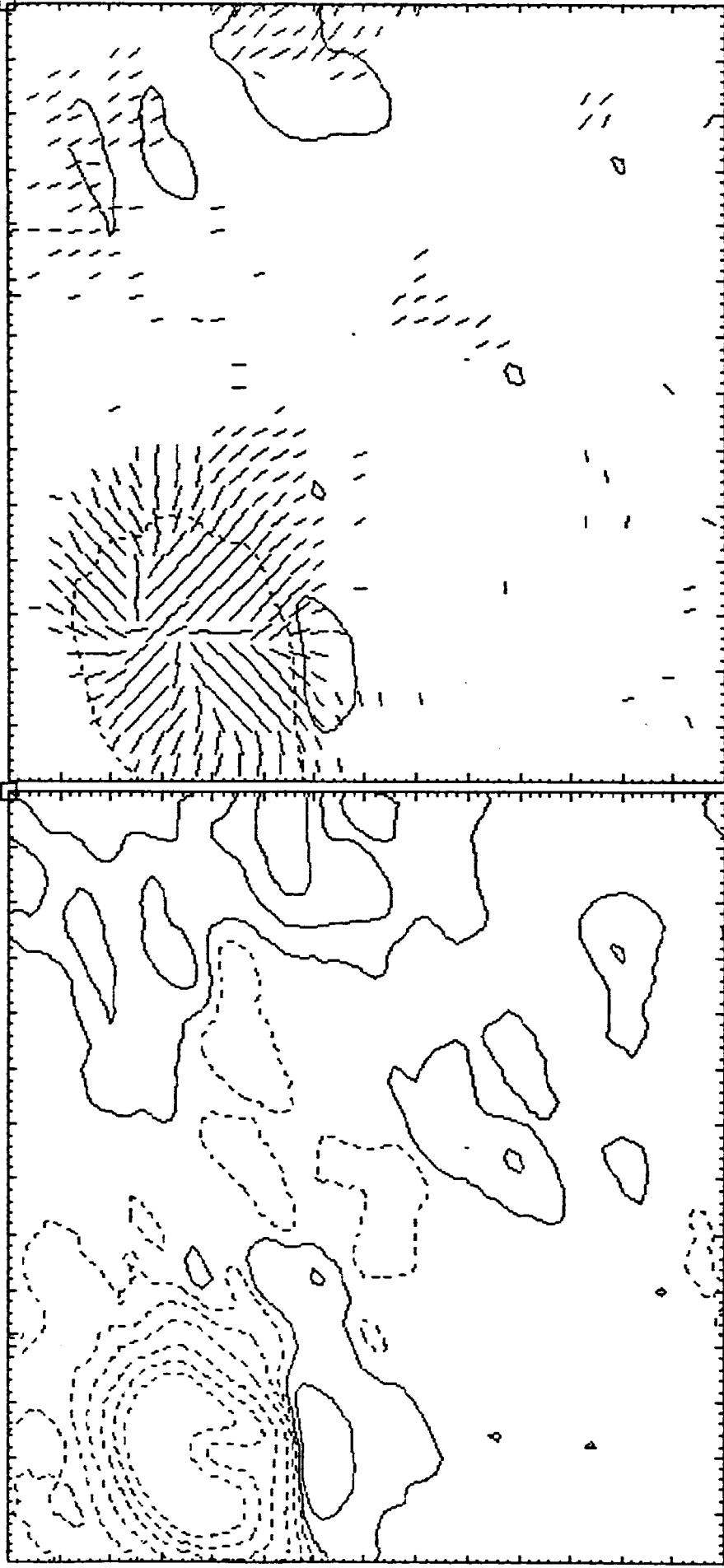
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AZIMUTH

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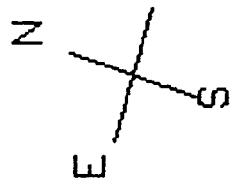


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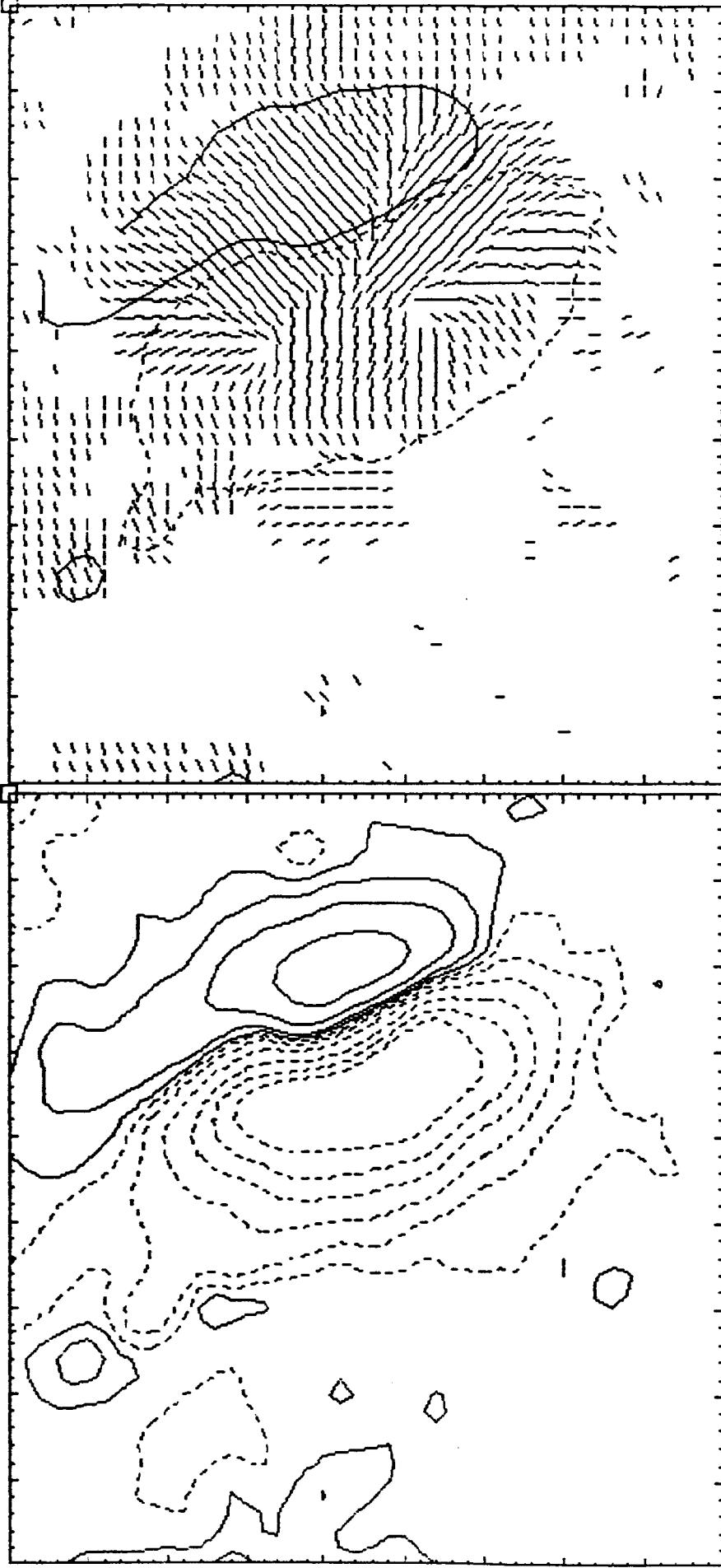


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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



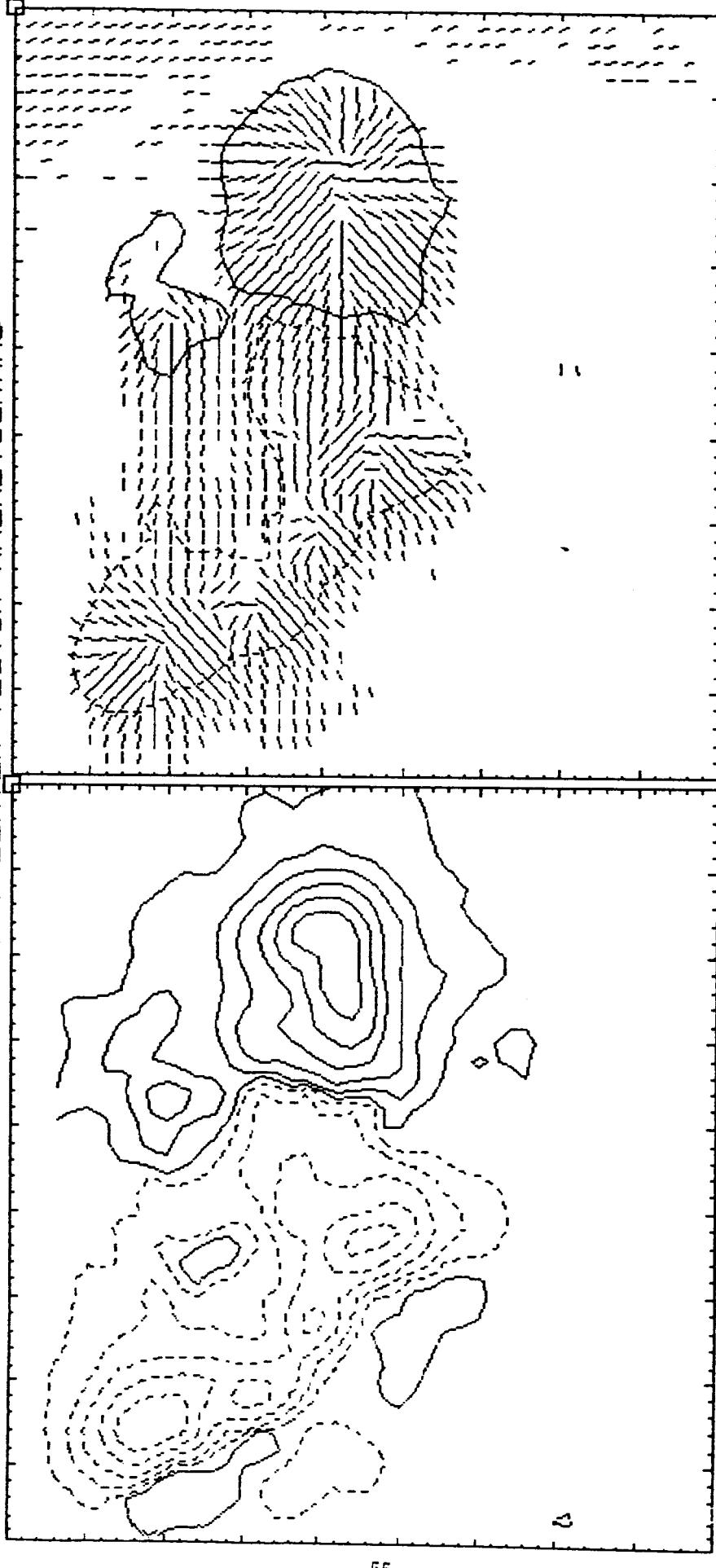
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N  
E  
W  
S

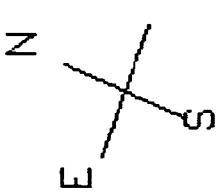
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



55

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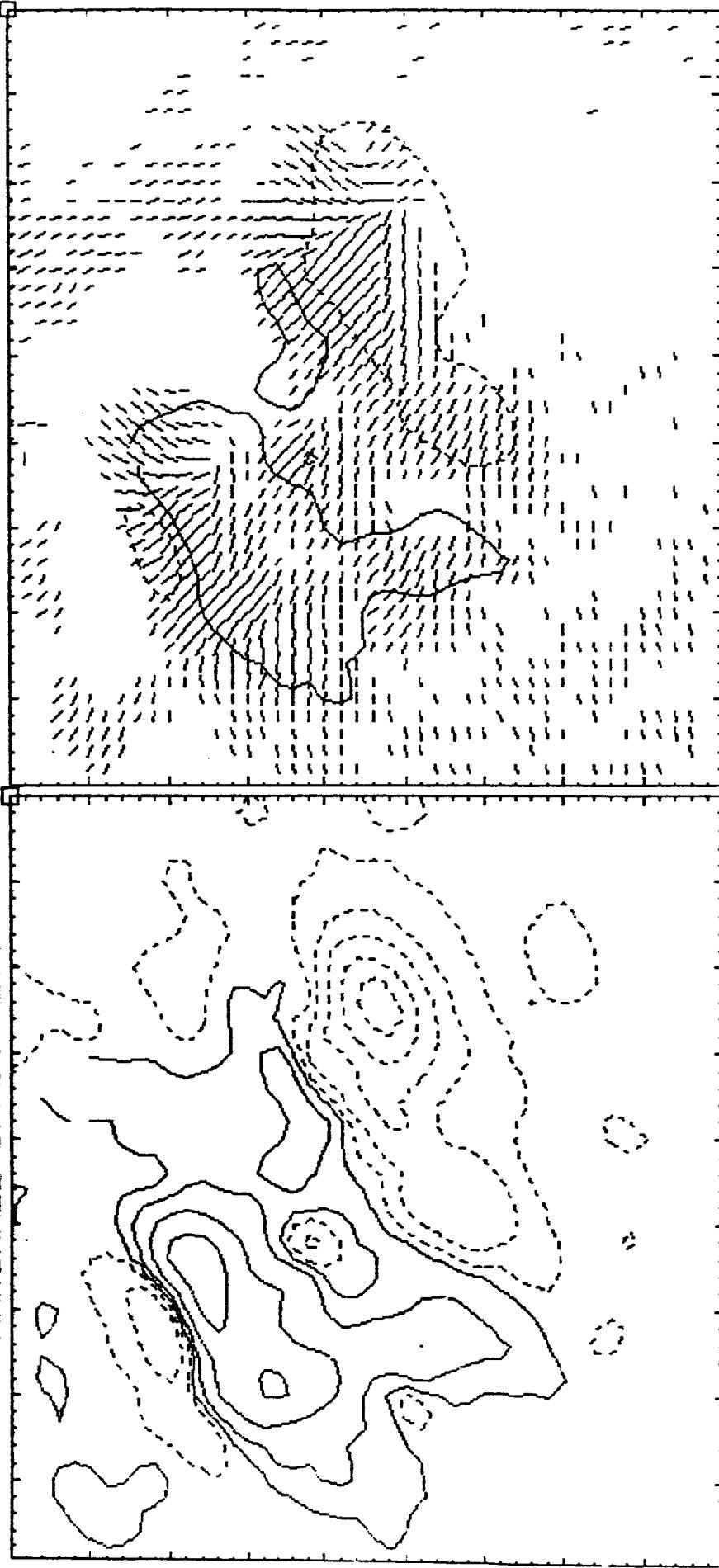
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MEASURED  
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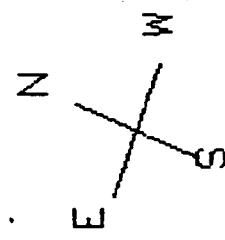


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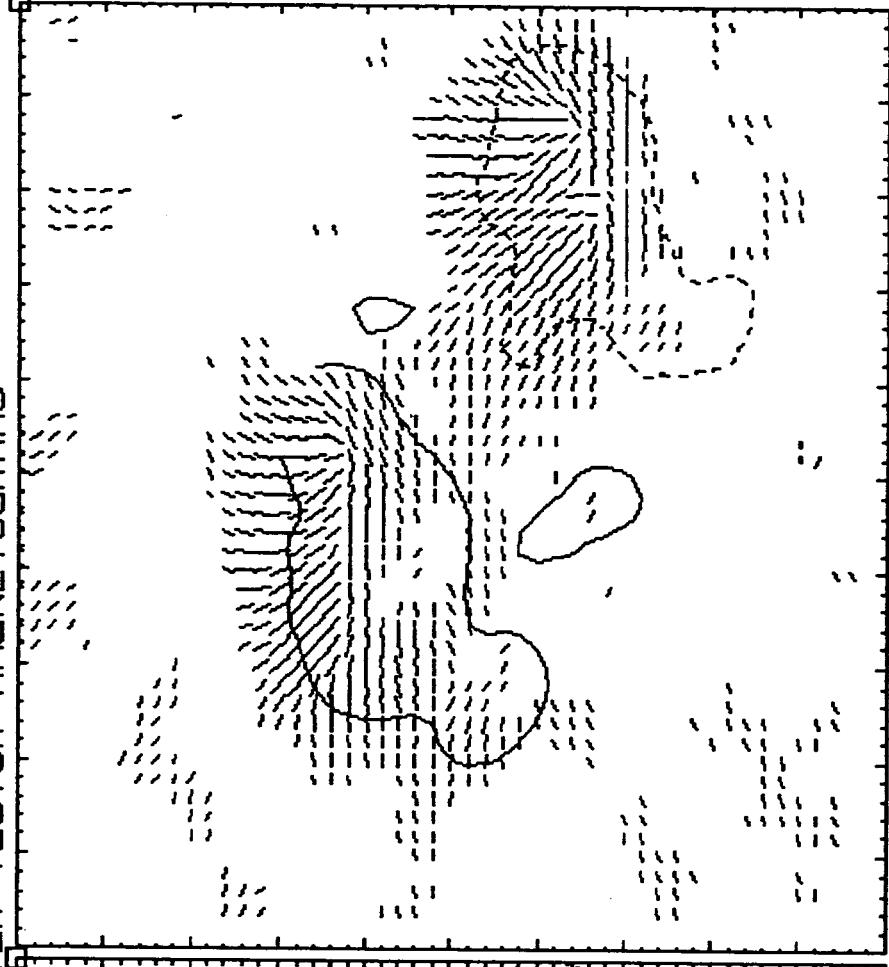
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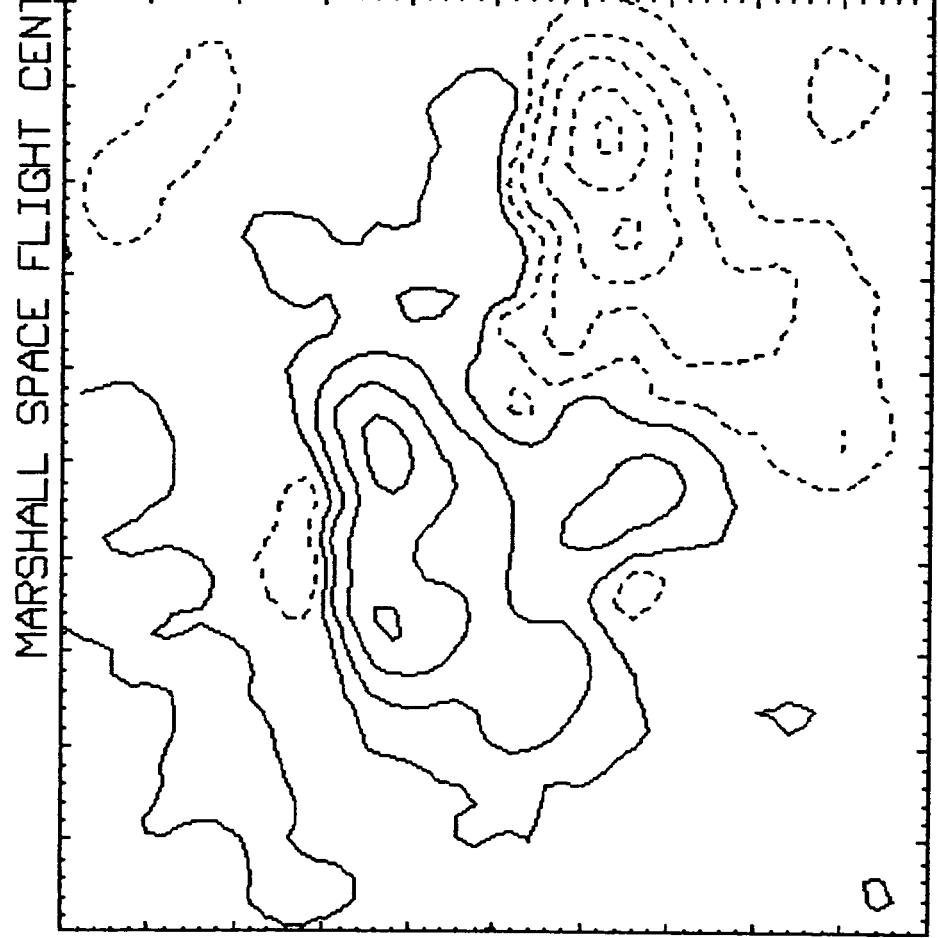
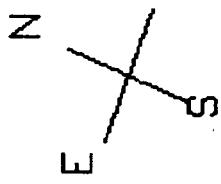
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



MEASURED  
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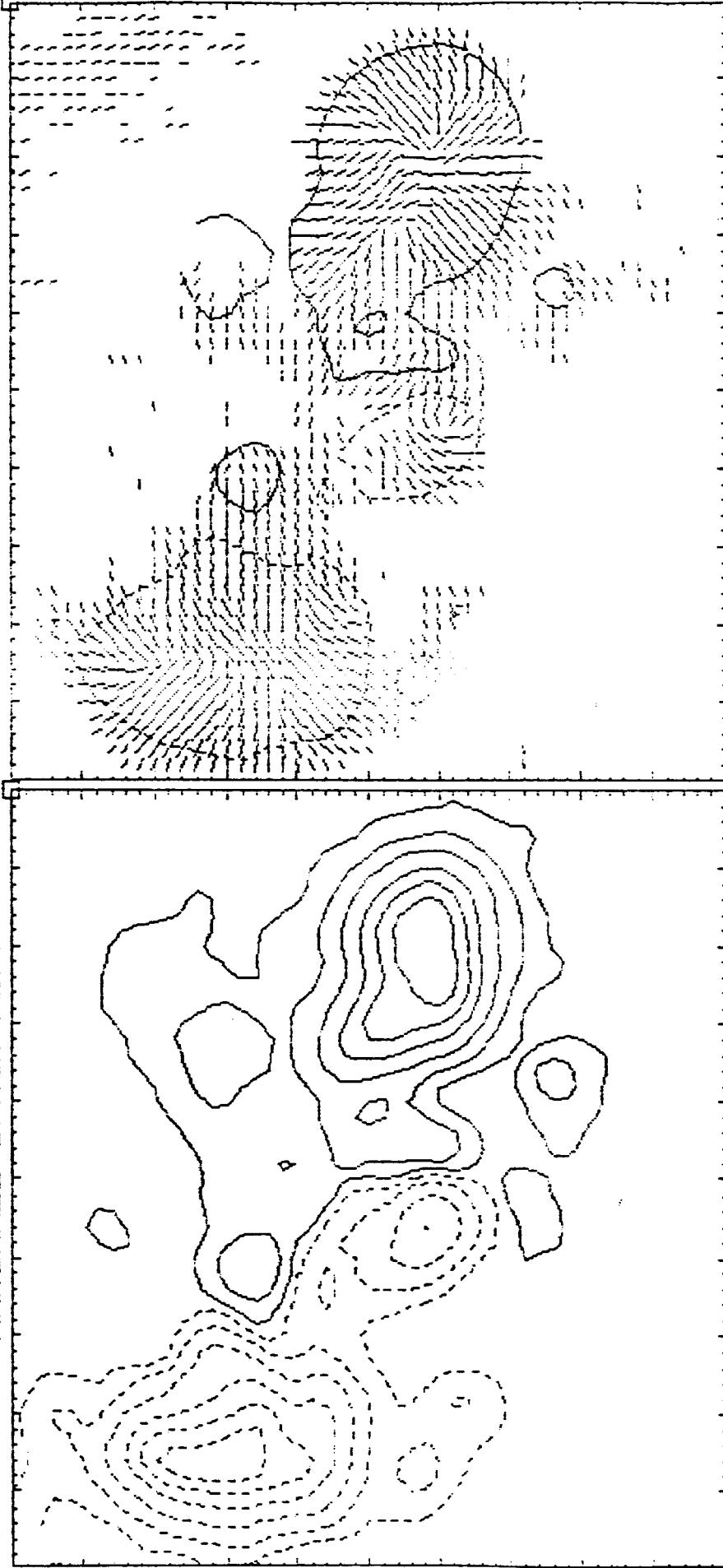


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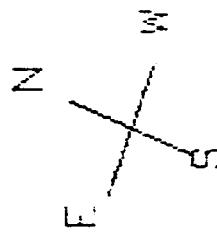
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MARSHALL SPACE FLIGHT CENTER VICTOR MAGNETograms

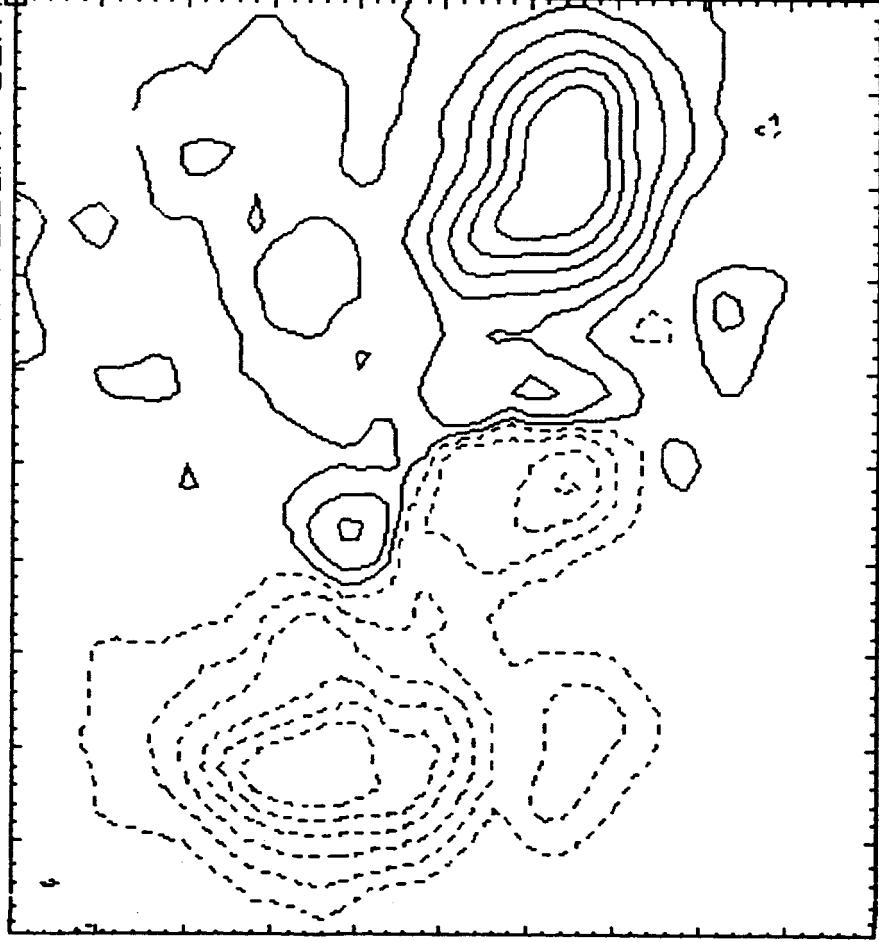
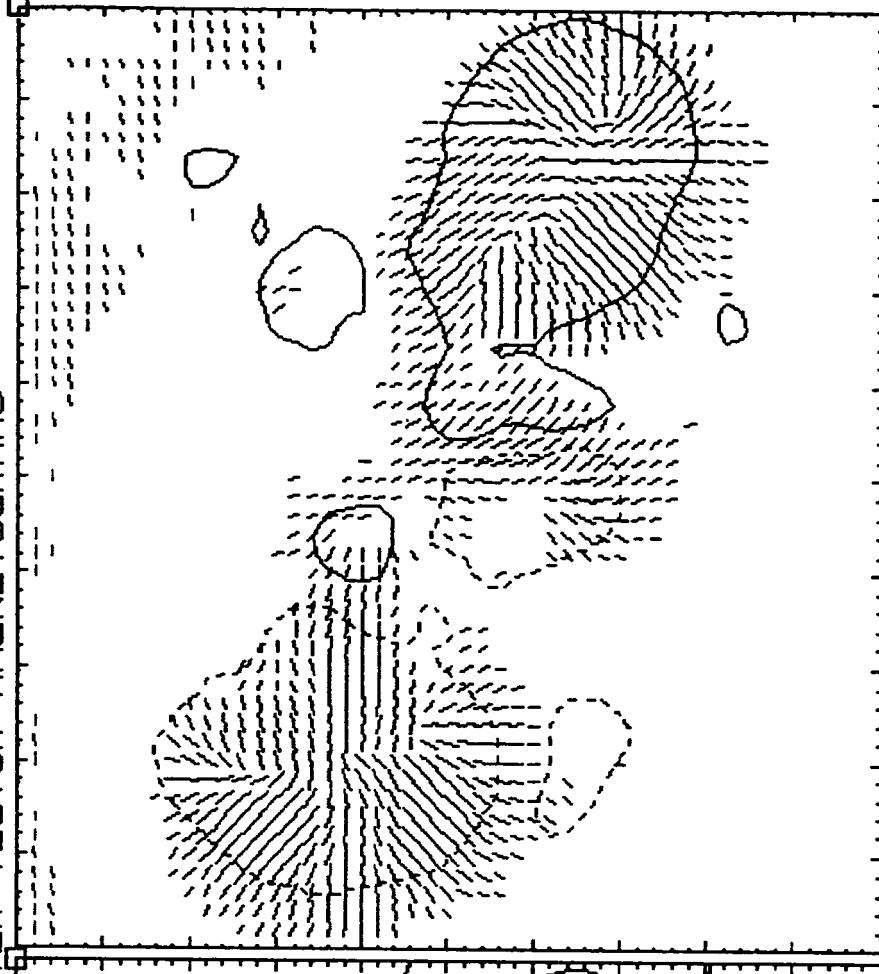


MEASURED  
AZIMUTH  
FILE:  
L00407C.02  
AR # 4958  
TIME 0611:14:56

MEASURED  
LONGITUDINAL  
FILE:  
L00407C.02  
AR # 4958  
TIME 0611:14:56

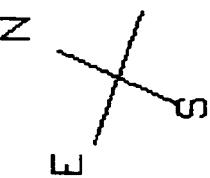


MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



MEASURED  
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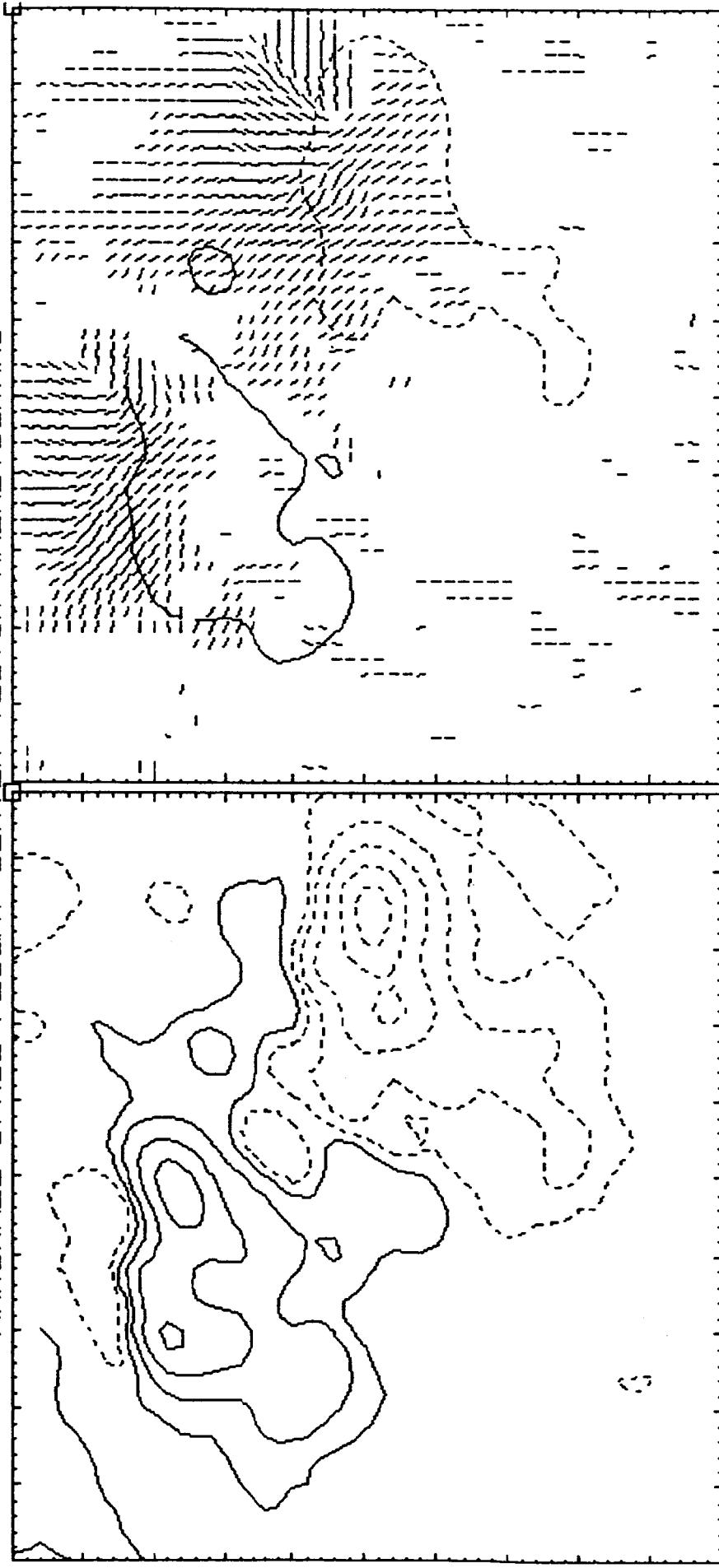
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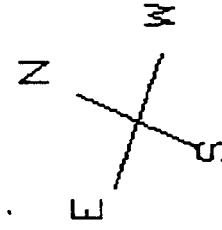
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

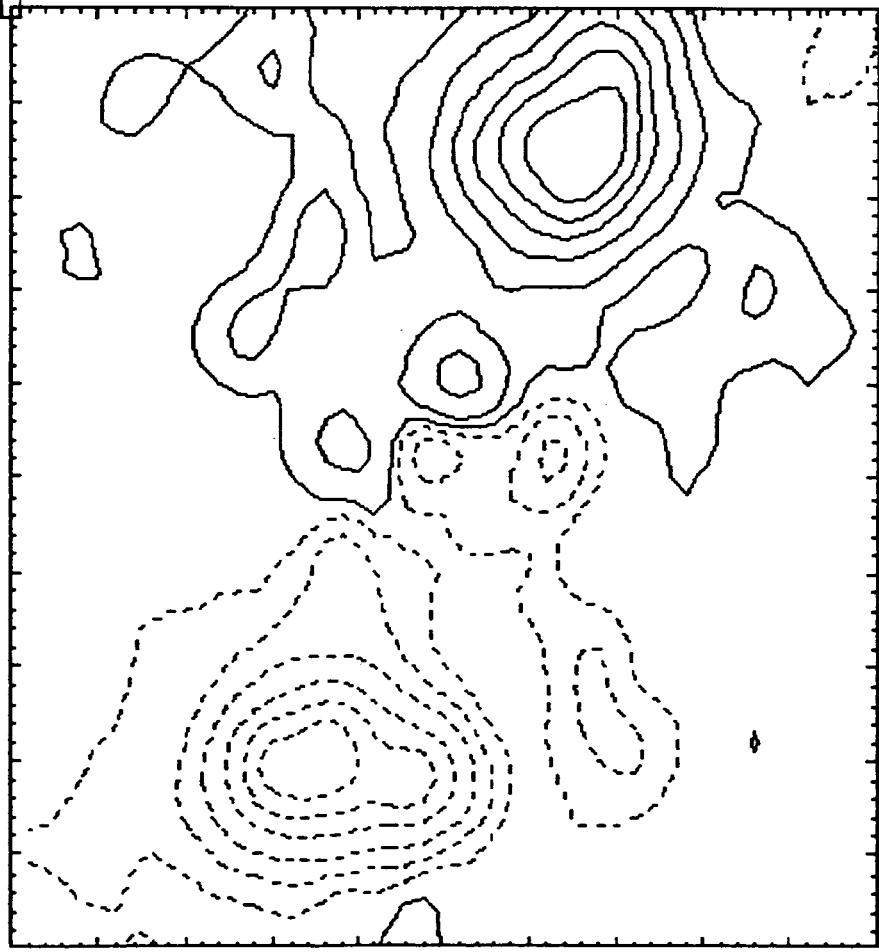


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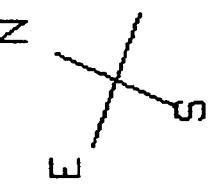
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



MEASURED  
LONGITUDINAL

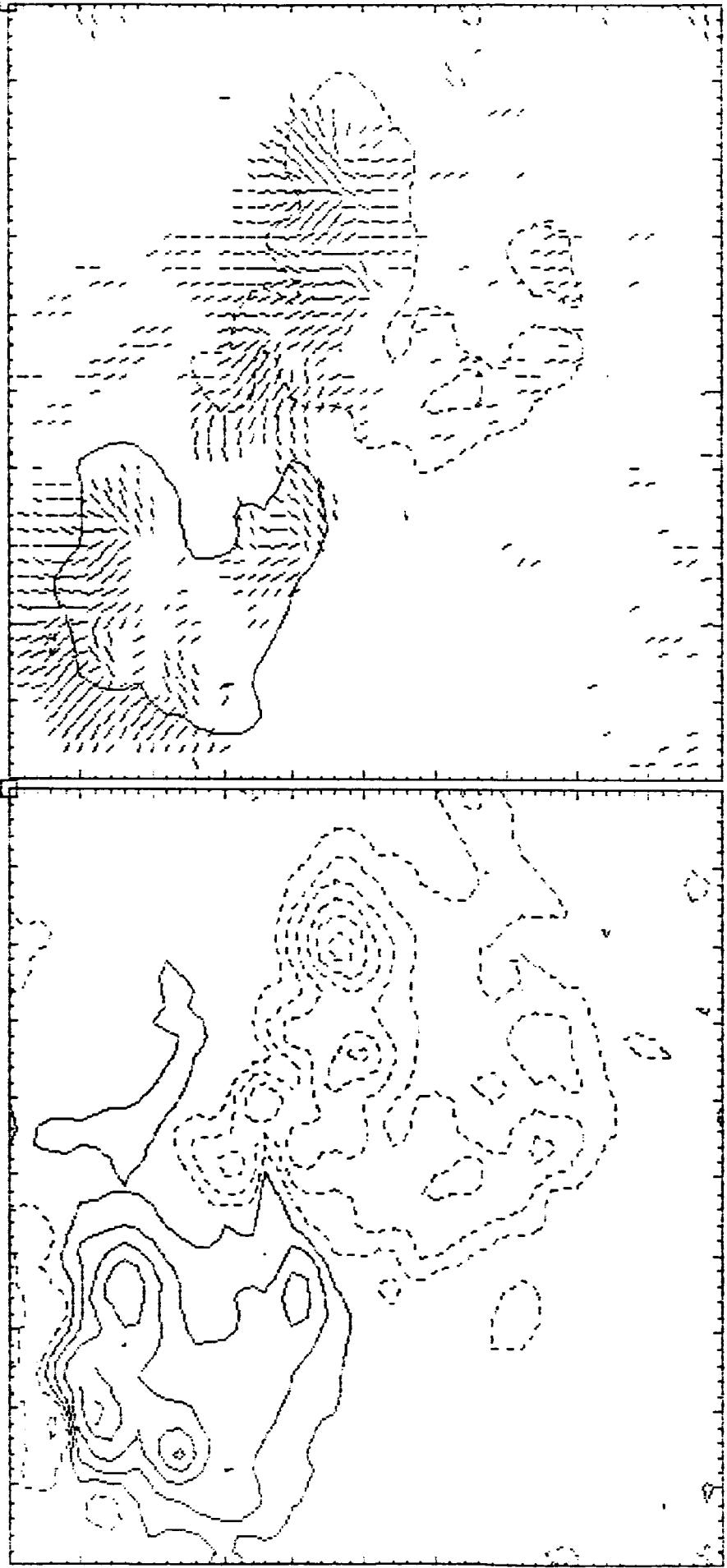
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MEASURED  
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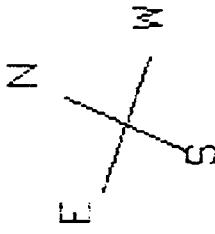
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETograms

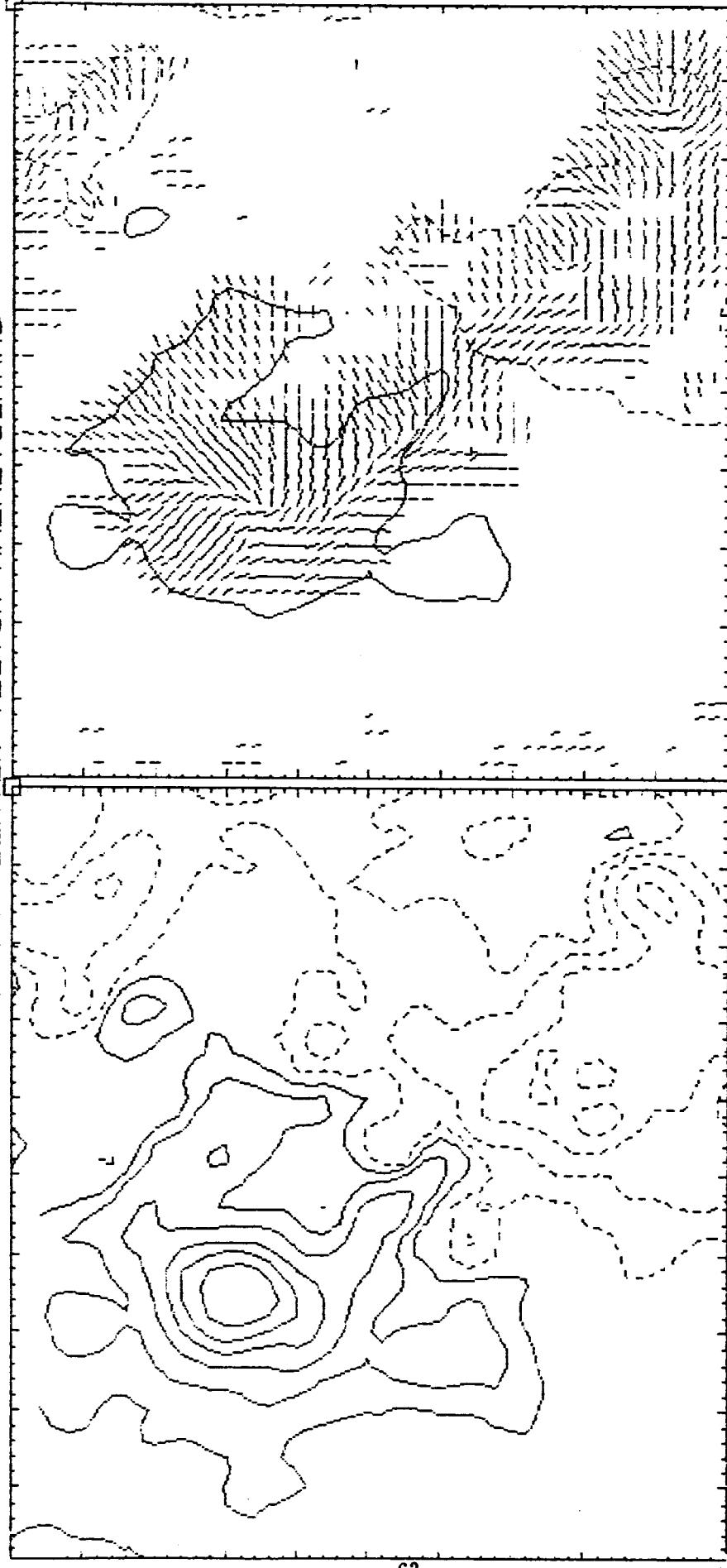


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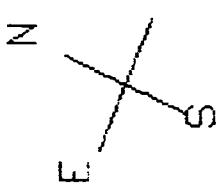


MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



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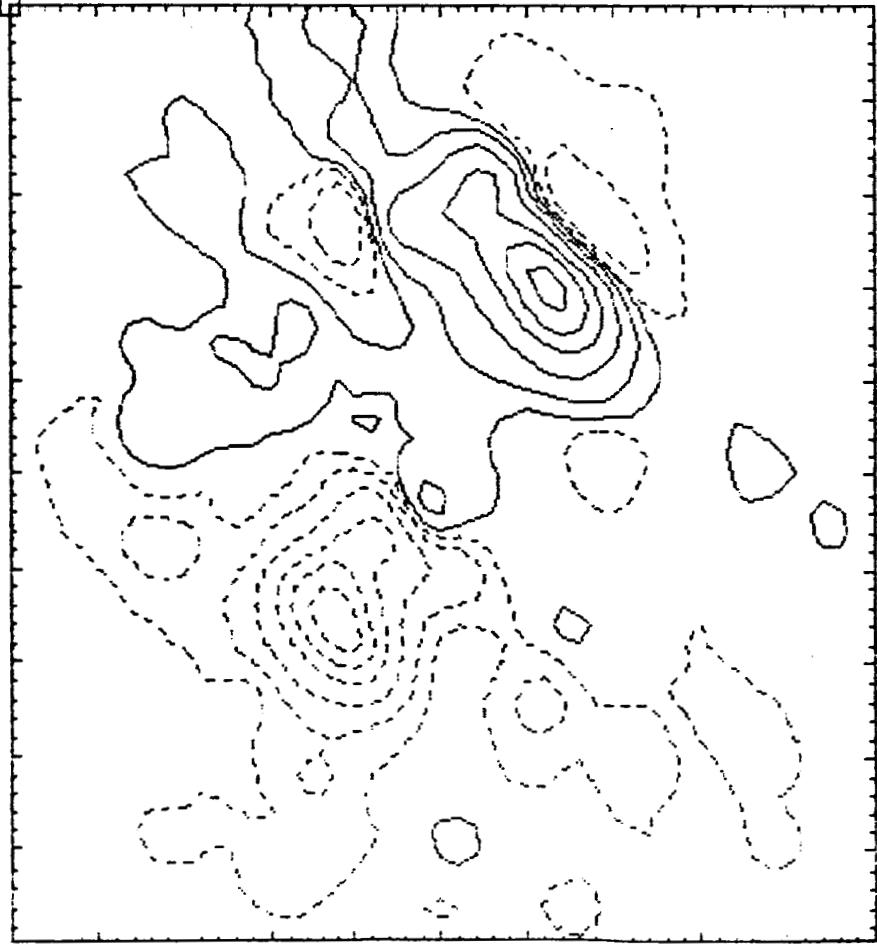
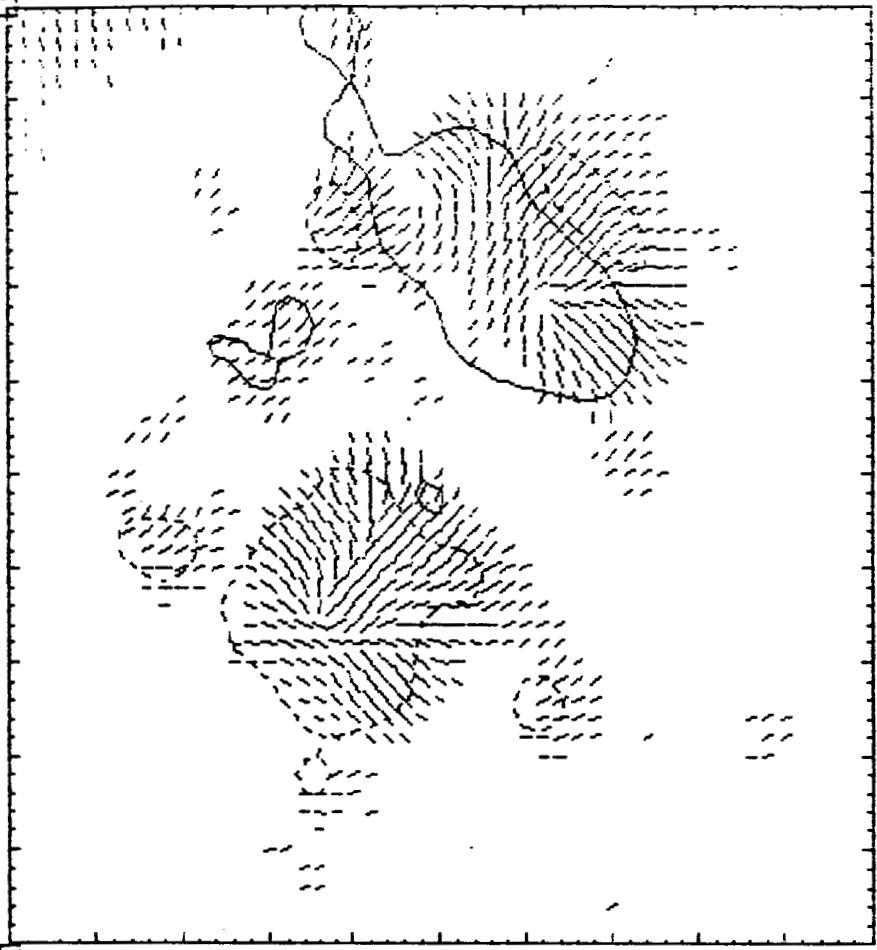
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MEASURED  
AZIMUTH

FILE:  
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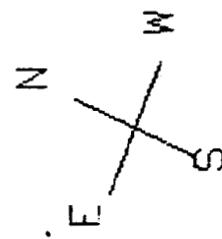
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



MEASURED  
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AR # 4958  
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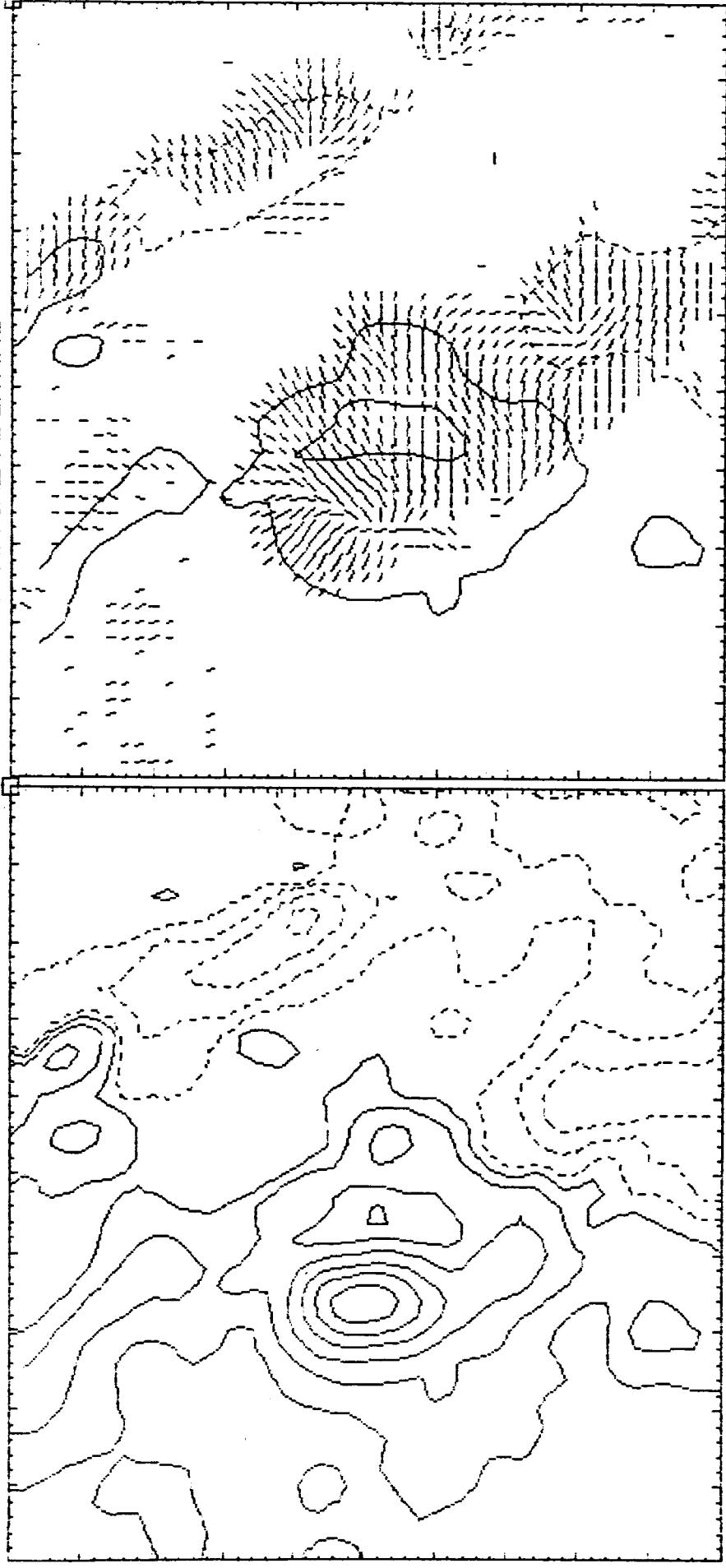


MEASURED  
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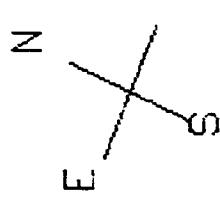
MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



65

MEASURED  
LONGITUDINAL

FILE: L00635C.02  
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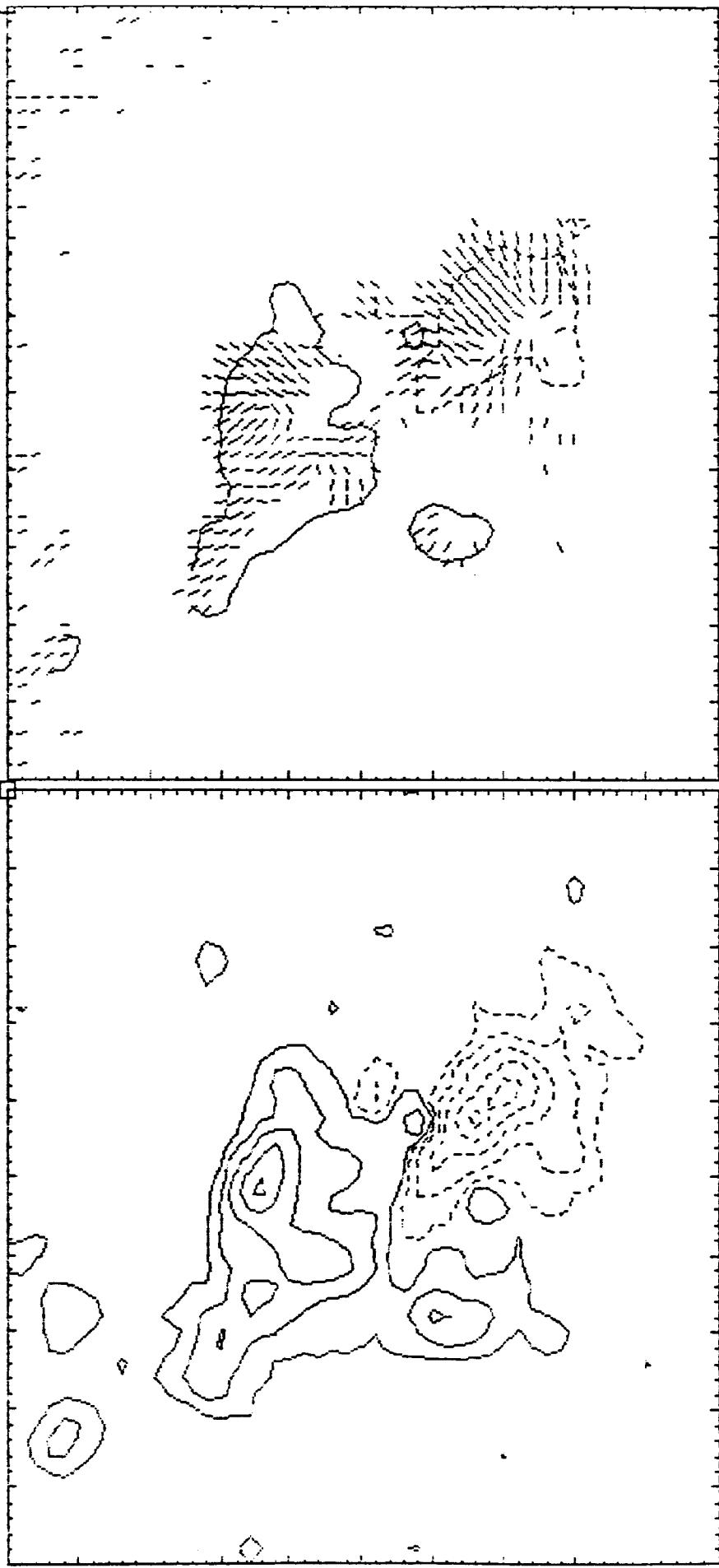


MEASURED  
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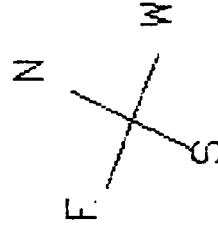
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MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

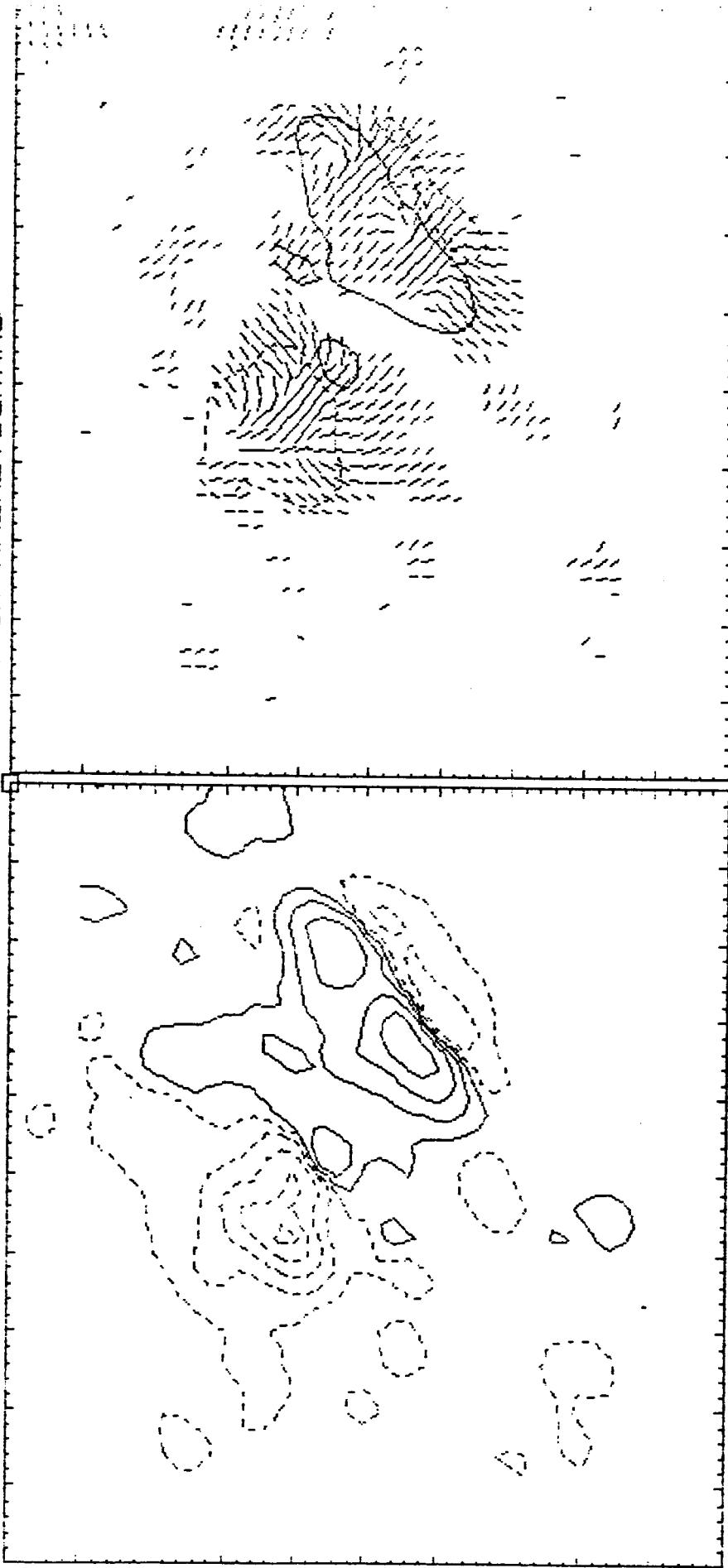


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L006H4C.02  
AR # 49E3  
TIME 067:15:34

MEASURED  
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FILE:  
L006H4C.02  
AR # 49E3  
TIME 067:15:34



MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETograms



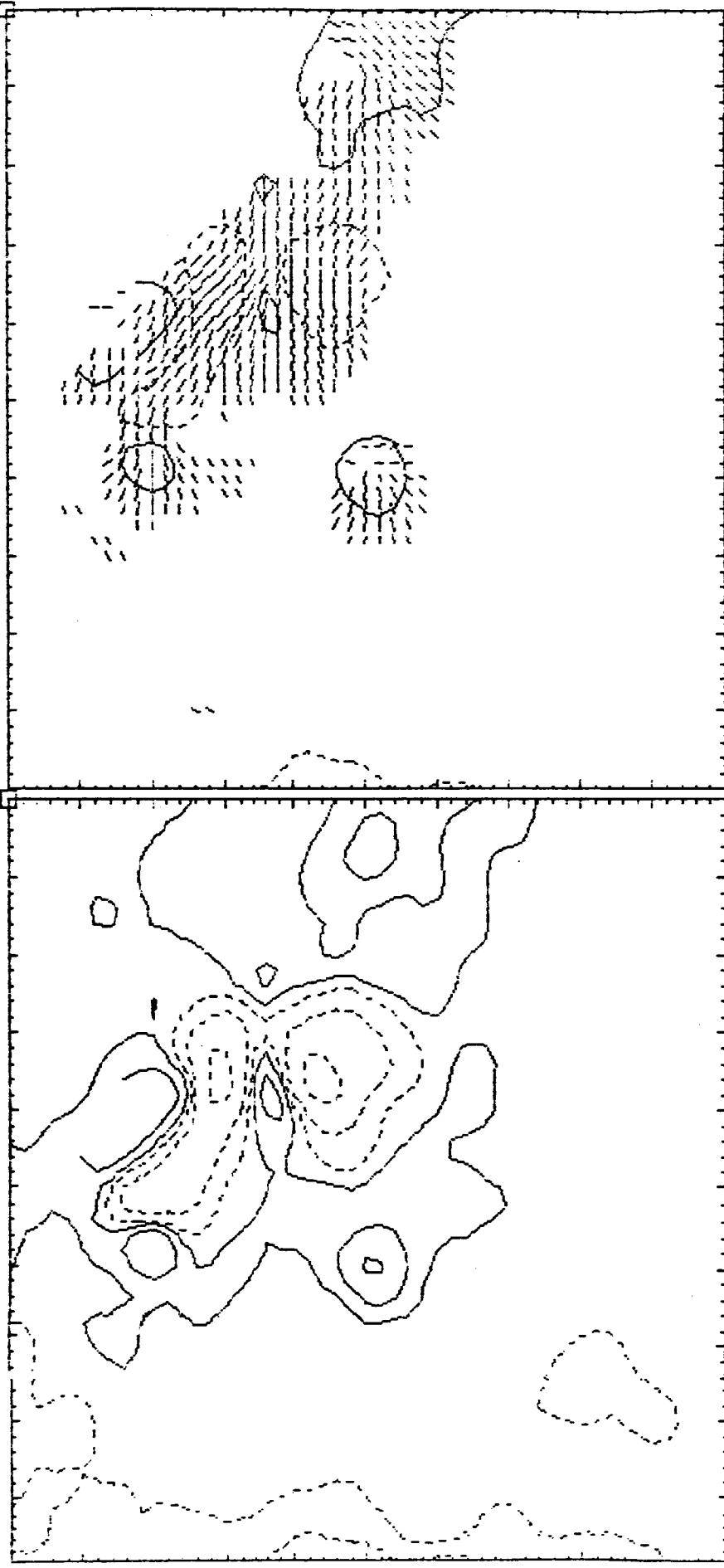
67

MEASURED  
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FILE:  
L0065JC.02  
AR # 4959  
TIME 067:16:16

MEASURED  
AZIMUTH  
FILE:  
L0065JC.02  
AR # 4958  
TIME 067:16:16

N  
E  
W  
S

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



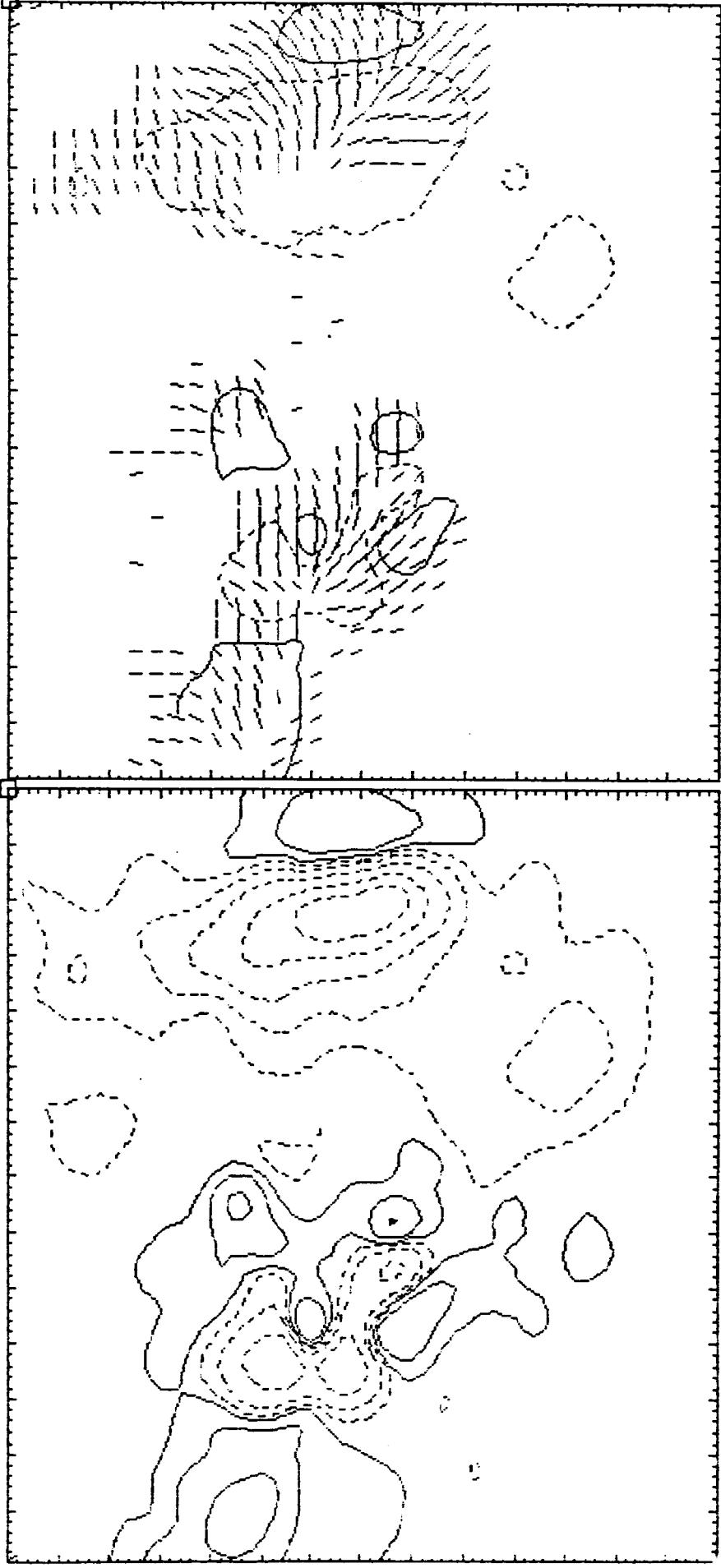
68

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TIME: 075:17:25

MEASURED  
LONGITUDINAL  
FILE:  
L00606C.02  
AR #: 4964  
TIME: 075:17:25

N  
E  
W  
S

MARSHALL SPACE FLIGHT CENTER MAGNETOTRANS



69

FILE: L0071EC.02  
TIME 075: 15:08  
AP # 4964  
LON/ITUDE  
MEASURED

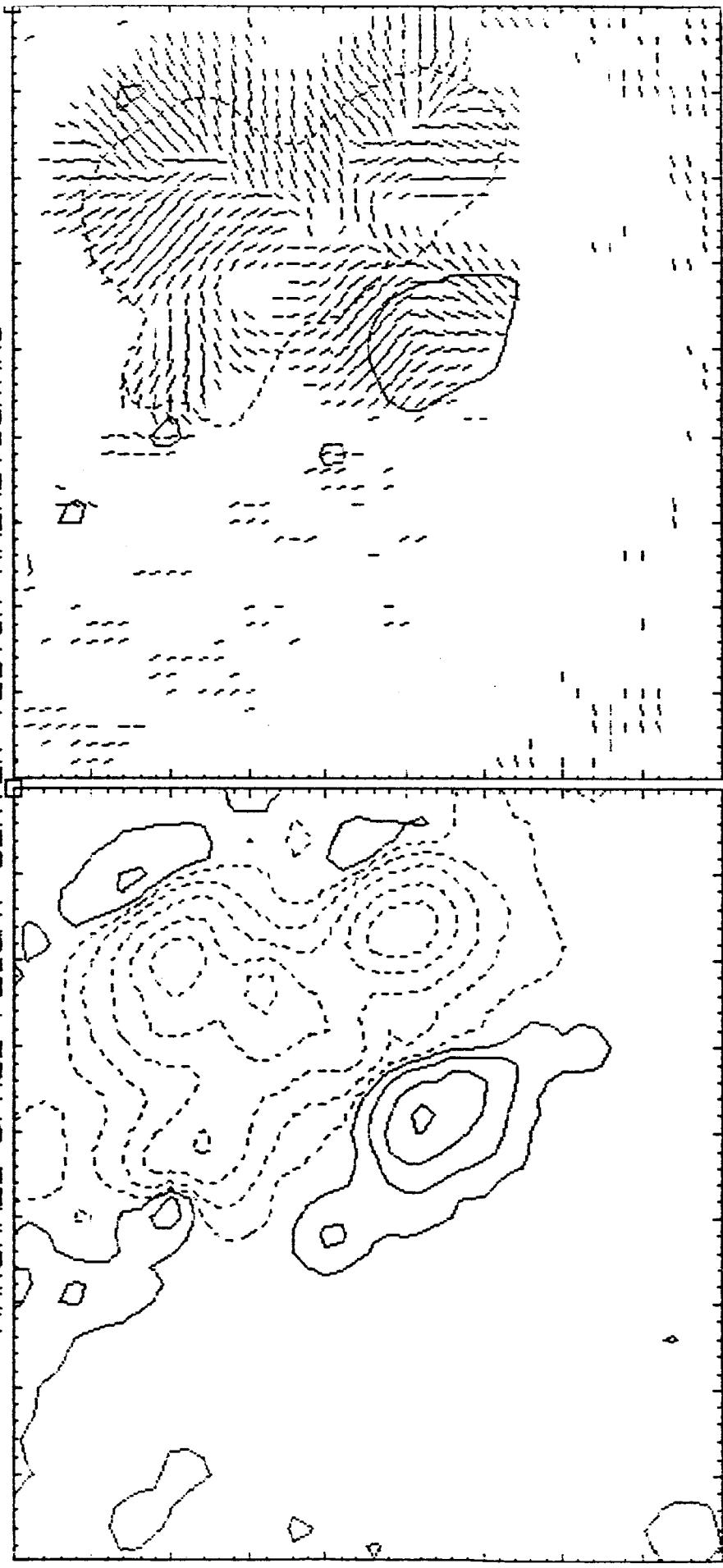
N  
W  
S  
E

FILE: L0071EC.02  
TIME 075: 15:08  
AP # 4964  
AZIMUTH  
MEASURED

FILE: L0071EC.02  
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AP # 4964

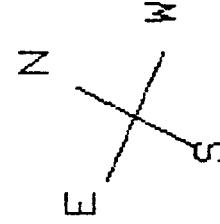
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AP # 4964

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



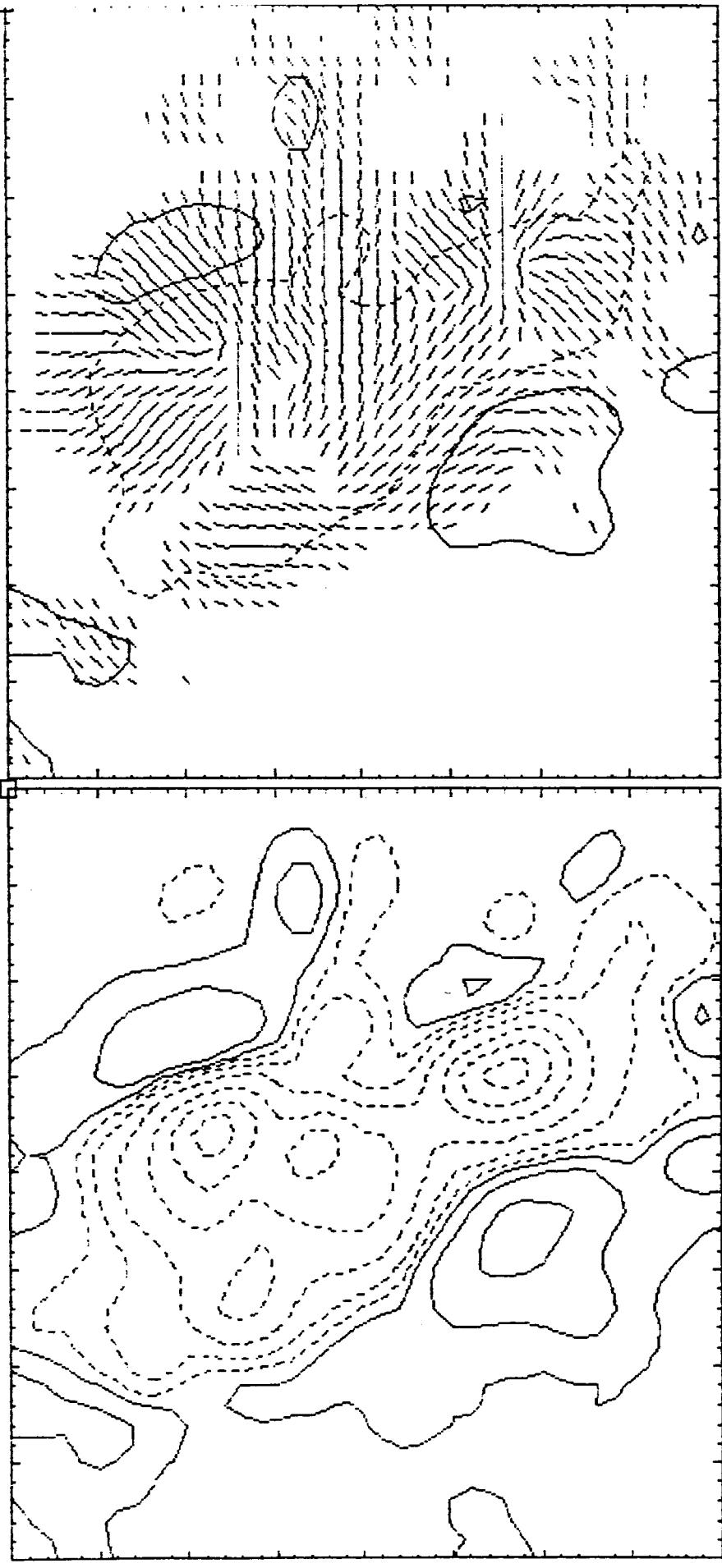
70

MEASURED  
LONGITUDINAL  
FILE:  
L80002C.02  
AR # 4965  
TIME 07B: 14:46



MEASURED  
AZIMUTH  
FILE:  
L80002C.02  
AR # 4965  
TIME 07B: 14:46

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



MEASURED

LONGITUDINAL

FILE:  
L80900C.02

AR # 4965  
TIME 0800:13:55

MEASURED

AZIMUTH

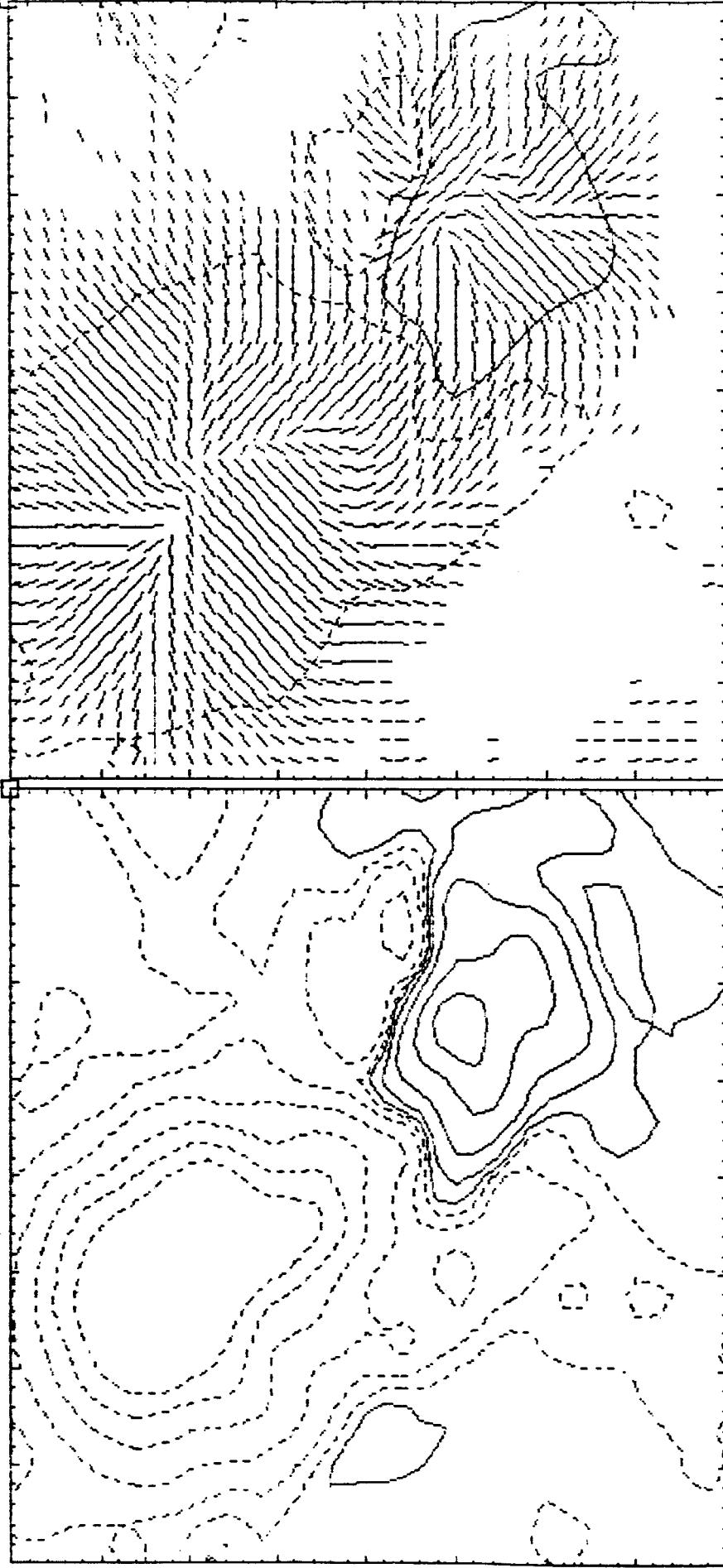
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MEASURED

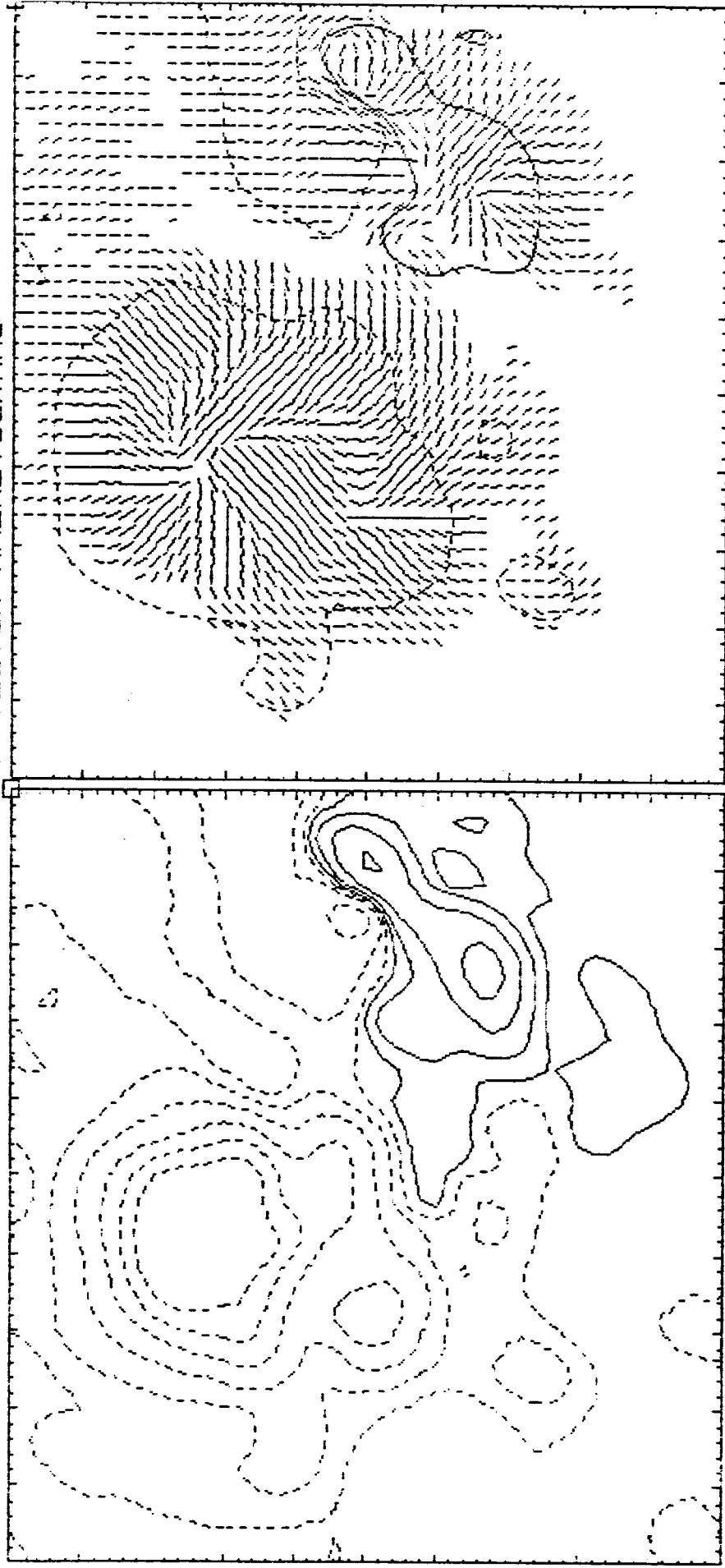


MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOTROGRAMS



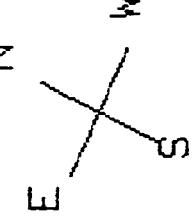
TIME 0880: 14:23  
AR + 45Eh  
FILE: LONGHSC.02  
AZIMUTH  
MEASURED  
N W  
E S  
TIME 0880: 14:23  
AR + 45Eh  
FILE: LONGHSC.02  
LONGITUDINAL  
MEASURED

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

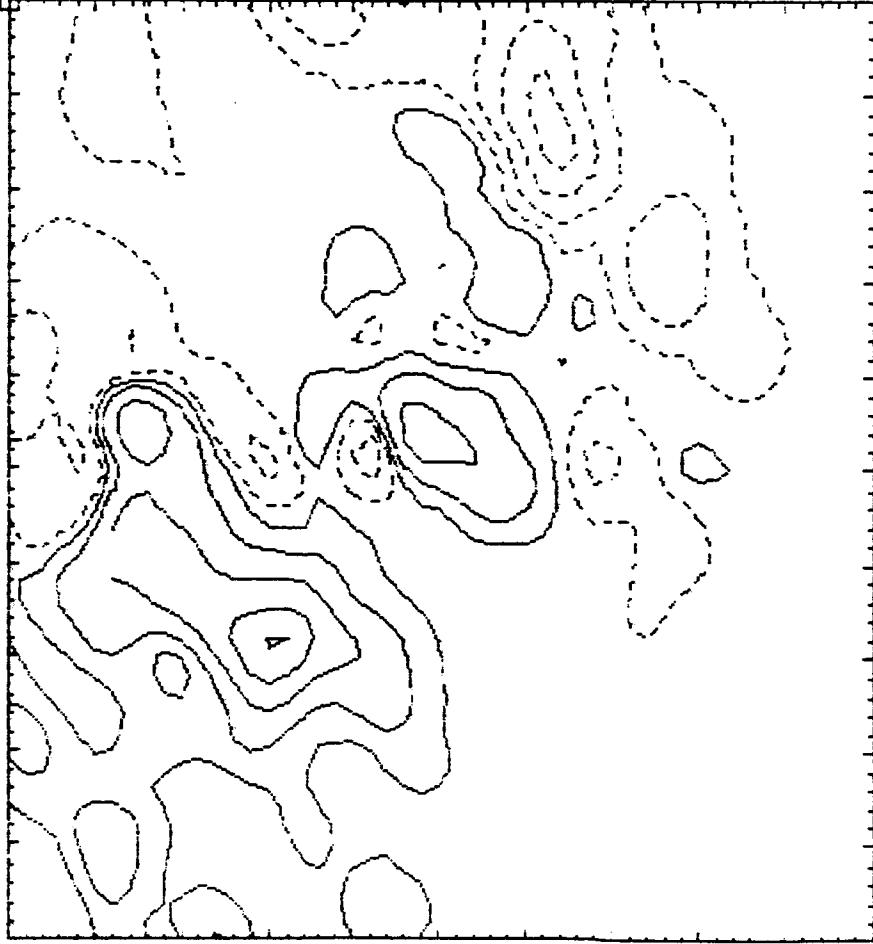


MEASURED  
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FILE:  
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AR # 4964  
TIME 0811:14:48

MEASURED  
AZIMUTH  
FILE:  
L01173C.02

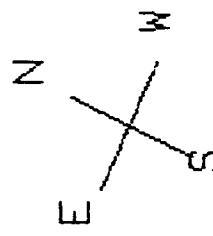


MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

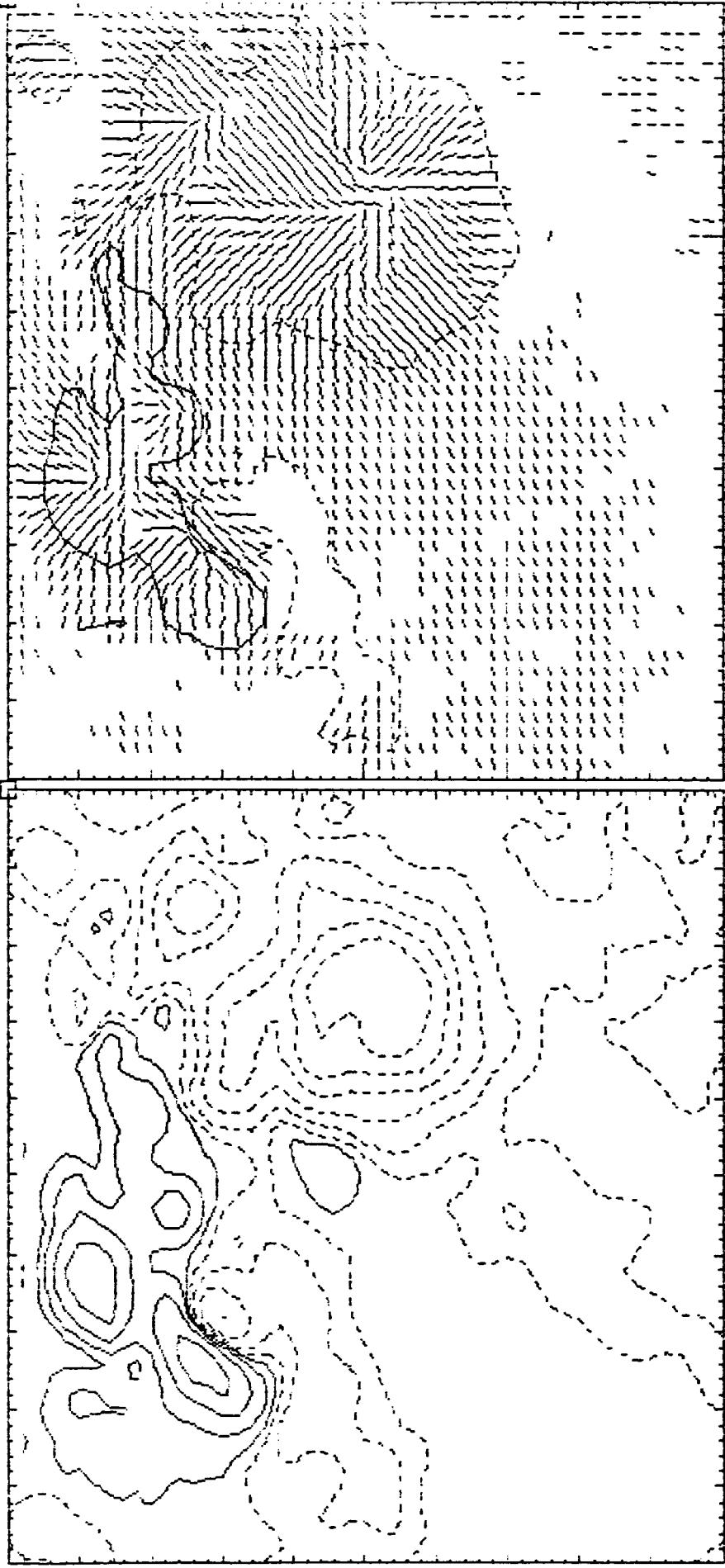


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FILE:  
L0120EC.02  
AR # 4972  
TIME 0811:17:11

MEASURED  
AZIMUTH  
FILE:  
L0120EC.02  
AR # 4972  
TIME 0811:17:11



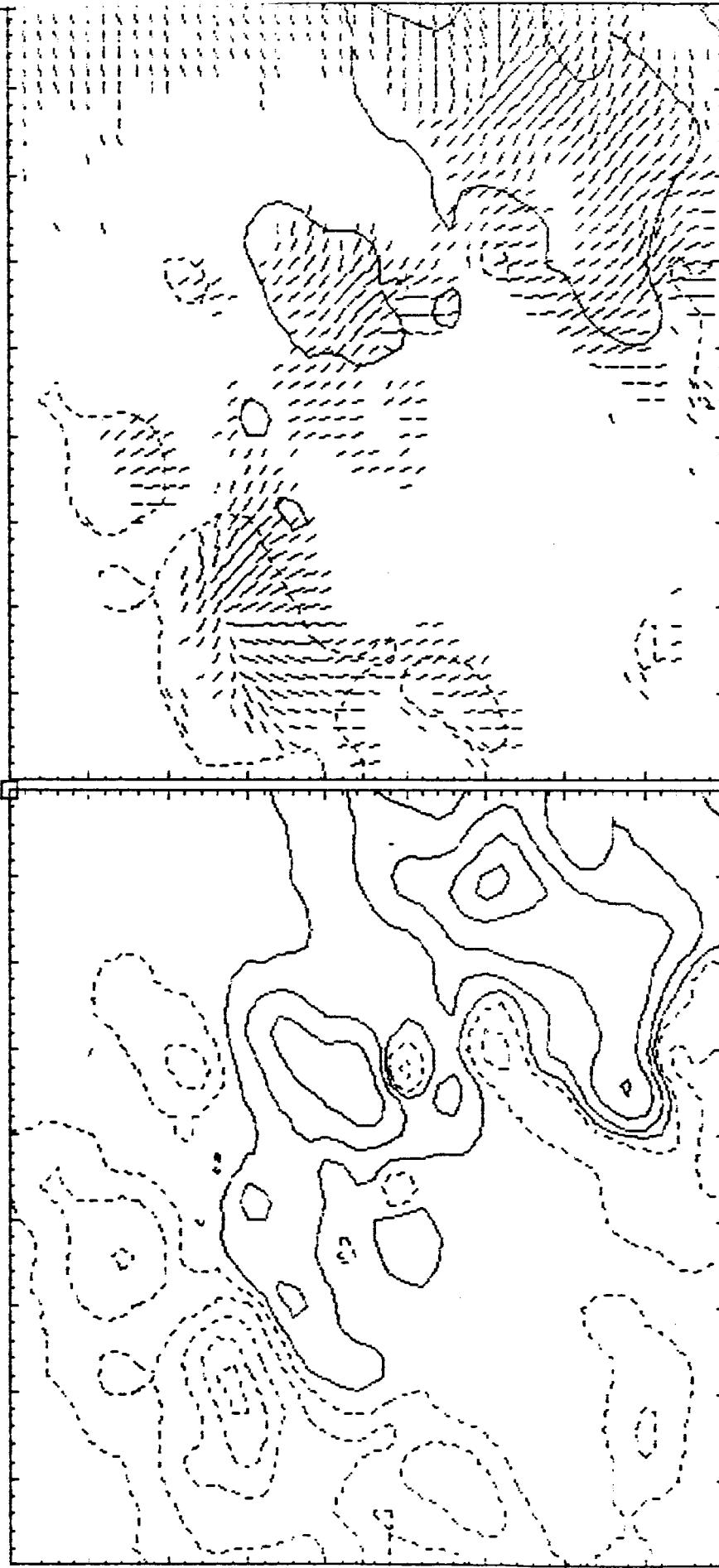
MARSHALL SPACE FLIGHT CENTER ECTOR MAGNETOGRAMS



MEASURED  
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FILE:  
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TIME 0811:19:34  
AP # 4954

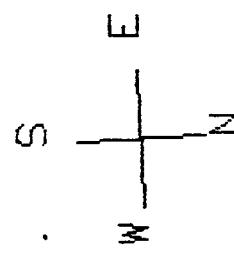
MEASURED  
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FILE:  
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TIME 0811:19:34  
AP # 4954

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

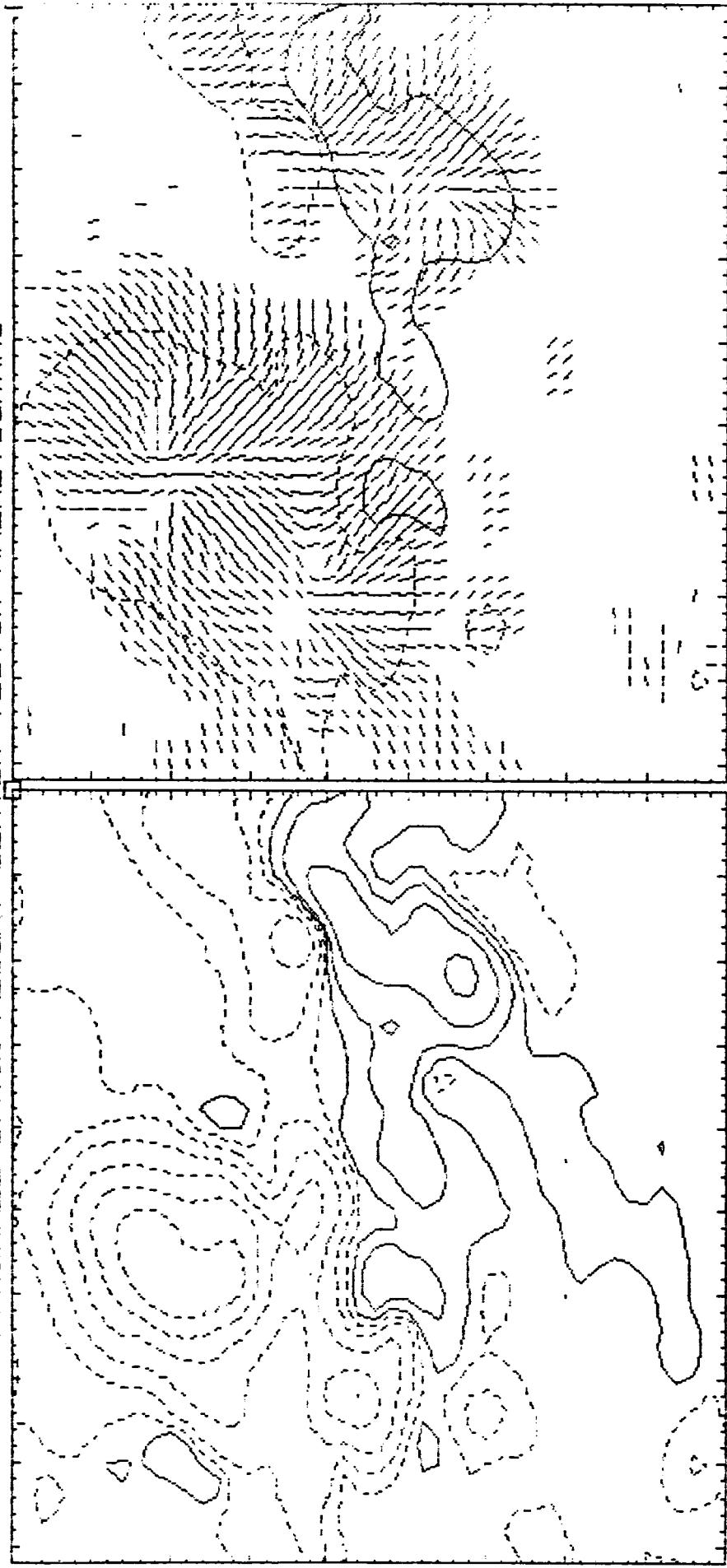


MEASURED  
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L01260C.02  
AR # 4972  
TIME 000:00:06

MEASURED  
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FILE:  
L01260C.02  
AR # 4972  
TIME 000:00:06



MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS

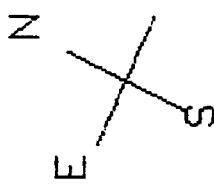


77

MEASURED  
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L01278C.02

AR #: 4984  
TIME 0821:15:16



MEASURED  
AZIMUTH

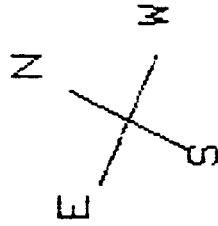
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AR #: 4984  
TIME 0821:15:16

MARSHALL SPACE FLIGHT CENTER VECTOR MAGNETOGRAMS



FILE: L01287C.02  
AR #: 4972  
TIME: 082:15:48  
LONGITUDINAL  
MEASURED



FILE: L01287C.02  
AR #: 4972  
TIME: 082:15:48  
AZIMUTH  
MEASURED

APPROVAL

NASA MARSHALL SPACE FLIGHT CENTER SOLAR OBSERVATORY REPORT  
JANUARY-MARCH 1988

By James E. Smith

The information in this report has been reviewed for technical content. Review of any information concerning Department of Defense or nuclear energy activities or programs has been made by the MSFC Security Classification Officer. This report, in its entirety, has been determined to be unclassified.

E. Tandberg-Hanssen  
E. TANDBERG-HANSSEN  
Director  
Space Science Laboratory